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NOVEMBER 1935

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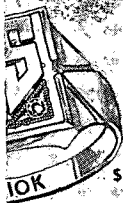
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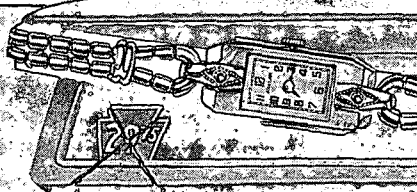
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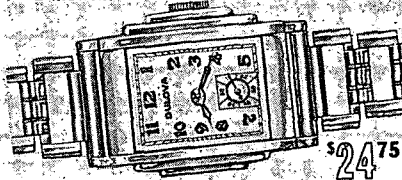
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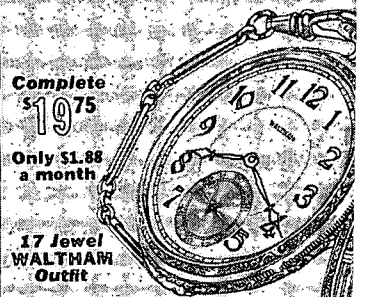
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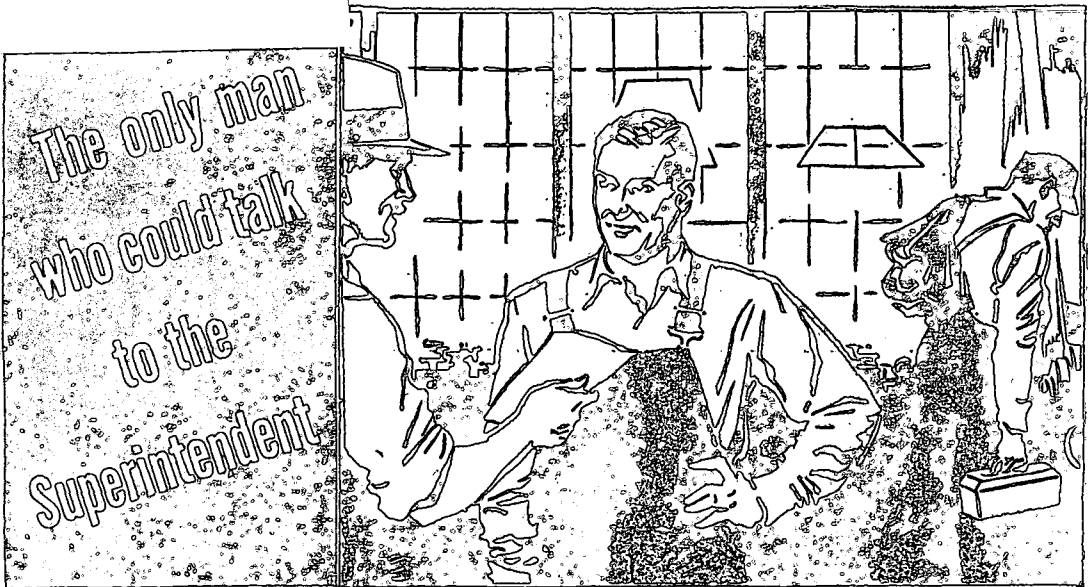


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VOLUME XVI
NUMBER 3

ASTOUNDING STORIES

NOVEMBER
1935

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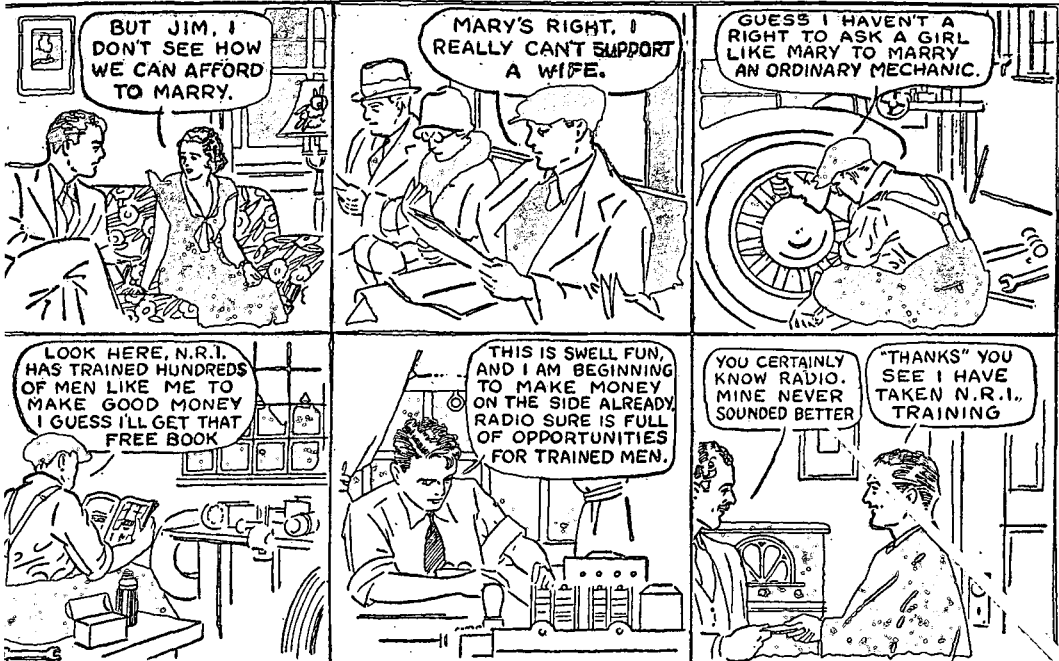
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**J. E. SMITH, President, Dept. 5KD
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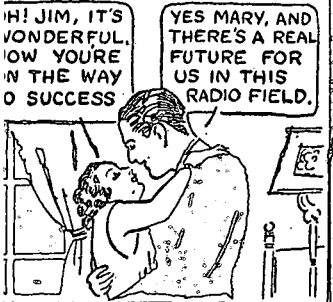
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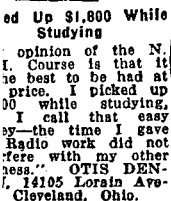
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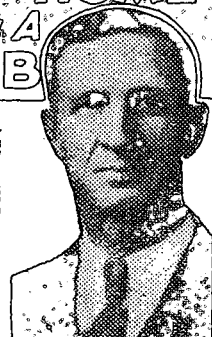
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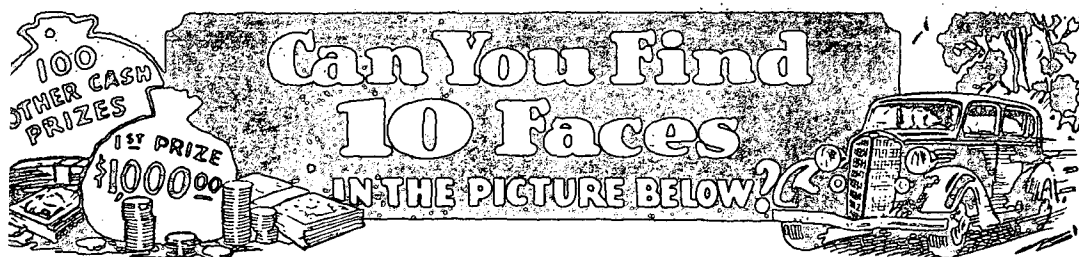
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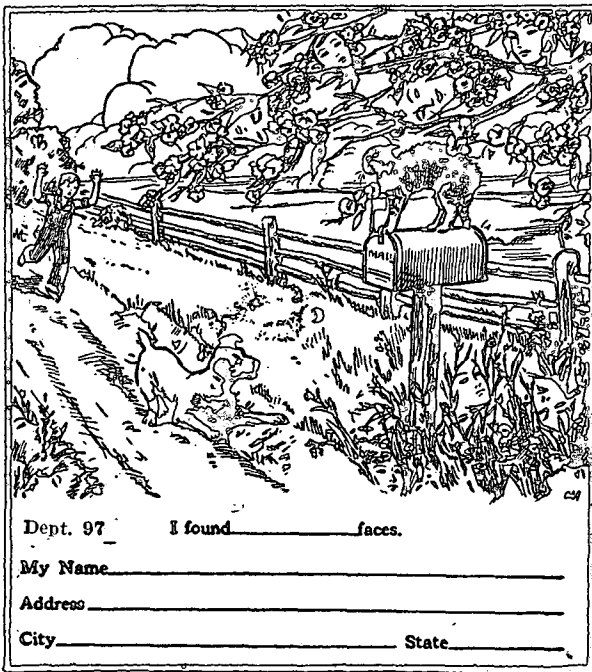
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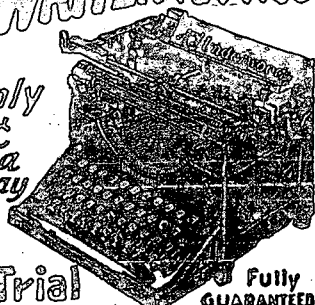
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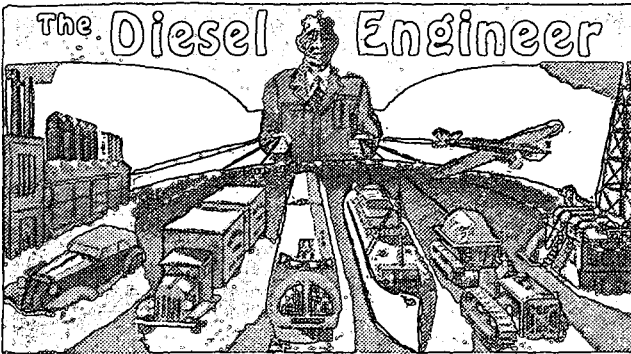
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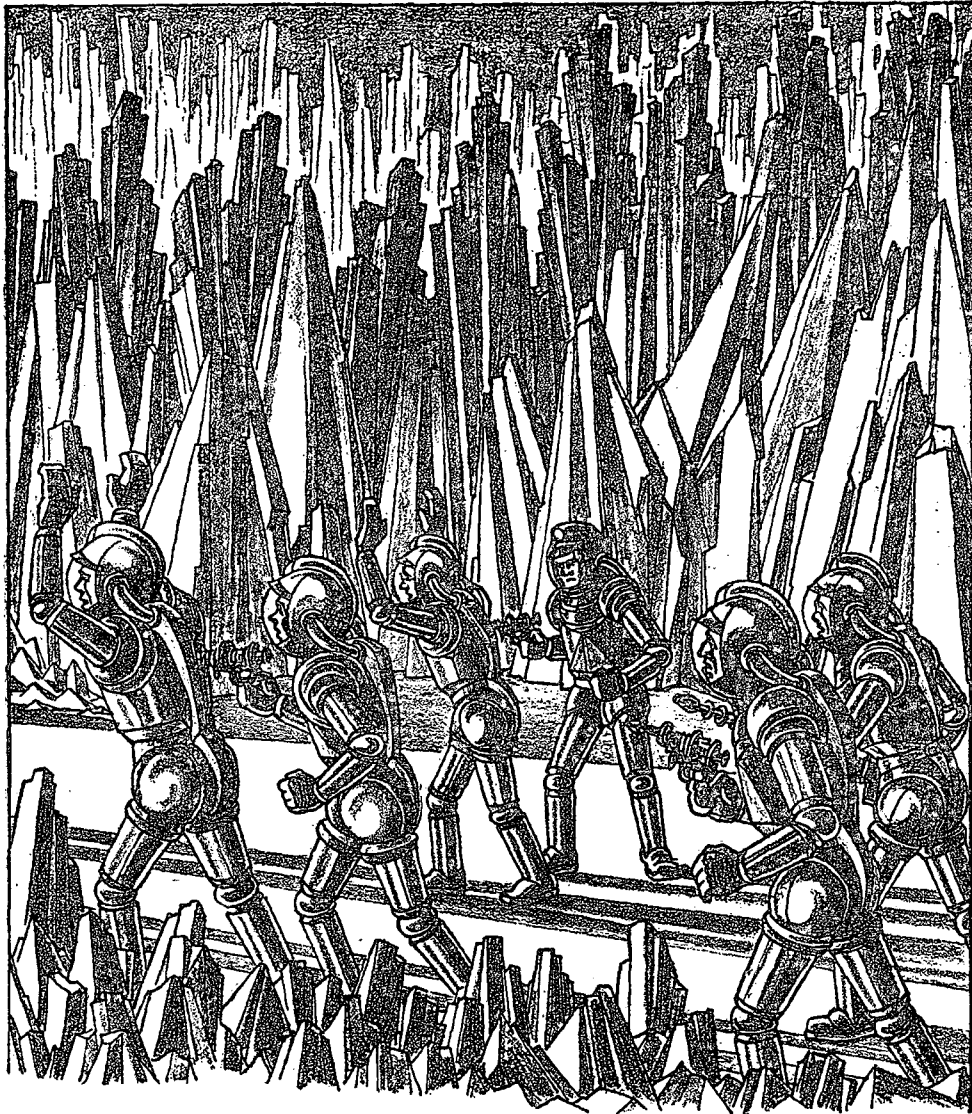


Muzzles thrust against their backs, Keene and Solomon Nestor trudged wearily through the cup-shaped depression with its high, black cliffs of fantastic shapes.

THE DUTCH ROCKET *Aard-kin*—out of Middleburg, passengers and freight—dropped gingerly toward the mist and cloud-girt Earth some twelve thousand miles below, underjets cushioning the fall. This last leg of the journey from Venus was the ticklish part of the trip; for the

The best story up to now

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great, cigar-shaped rockets, beautifully swift in space, were anything but maneuverable in a strong gravitational field; and Captain Peter Ten Eyck had no particular desire to descend in either central Europe or mid-Atlantic, to the resultant disgust of the home office. He

wanted to hit Middleburg in Zeeland.

Off to the right appeared a very curious shape, visible no more than a quarter of a mile away through the bridge-room port. "*Donder!*" said Captain Ten Eyck feelingly.

At the same moment the annunciator

beside him remarked, "Cut your jets!" "Aasvogel!" rejoined the captain. "Vaarken!" His other epithets were somewhat too expressive for permanent record.

The apparition against the black sky was swiftly drifting closer. It was distinguishable now as a glittering, metal rocket, but in no way like the tapering, cylindrical *Aardkin*, nor like any other rocket—save one.

It was a tubular triangle, from each corner of which rose a strong girder to meet an apex above. In effect, its sides and girders outlined a skeleton tetrahedron, and from the apex of the girders, the blue atomic blast flared down to spread fanlike into the space below. As it approached, the strange vessel was dwarfed by the giant freighter; it was no more than a hundred feet on a side, not an eighth the length of the *Aardkin*.

Again the annunciator uttered its metallic tones. It was responding, apparently, to a beam from the stranger. "Cut your jets!" it repeated. "Cut your jets, or we'll top you!"

Captain Ten Eyck ended his mutterings in a heavy sigh. He had no wish to have his vessel exposed to the withering blast of the pirate. He grumbled an order into the box beside him, and the roar of the jets ceased. Whatever maneuverability the lumbering freighter possessed was gone now; there was no longer any chance of ramming the agile attacker.

With the cessation of the jets came also complete weightlessness, since they were in a free fall; but a twelve-thousand-mile fall takes considerable time to become serious. Ten Eyck sighed again, ordered the floor magnets on, and waited phlegmatically for further directions. After all, he reflected, his cargo was insured, and Boyd's Marine could afford the indemnity. Besides, Boyd's was an English concern, and he had no mind to risk a good Netherlands ship and—if he did say it himself—a good Nether-

lands captain to save an English insurance company from loss.

The door to the bridge room opened. Hawkins, the first officer, clattered in. "What's here?" he shrilled. "The jets are off—" He caught sight of the glistening shape beyond the port. "The *Red Peri*! The blasted pirate!"

Captain Ten Eyck said nothing, but his pale-blue eyes stared moodily at the painted figure plainly visible on the attacker's hull—the figure of a crimson, winged imp. He needed no sign to identify the pirate; the queer construction of the vessel was proof enough, for there wasn't another such ship in the sky.

The voice sounded again. "Open your air lock." Ten Eyck gave the order and stalked grimly out to receive the boarding party. He heard the thud of the extending gangway as it struck, and the faint grind as the magnet bit to the freighter's hull. There came a brisk pounding on the inner door of the lock. The captain gave the order to open, his voice curiously equable. He was thinking again of the insurance company.

Most of the *Aardkin*'s score of passengers were crowded along the passage. The cutting of the jets, and perhaps the sound of Hawkins' voice from the beam room as he called hopefully for assistance, had apprised all of them of the events, and the glittering triangle of the *Red Peri* indicated their nature.

THE LOCK swung inward, opening upon the steel-ribbed, rubber-sheathed tunnel of the gangway. Figures in space suits, worn either for disguise or simply as precaution against the possible need of cutting their way in, filed through the circular doorway, automatics and gas guns menacingly visible.

There were no words spoken; a dozen buccaneers clanked methodically away toward the aft hold, and one, a slighter figure, stood grimly guarding the lock. In five minutes they were filing back,

dragging whatever loot they had found, with the queer movement of inertia without weight—much as if they floated the objects through water.

Ten Eyck saw the cases of *xixtchil* pods, valuable as so many diamonds, disappear into the lock; and the seventeen crated ingots of Venusian silver followed. He swore under his breath as he recognized also the casket of emeralds from the mines in the Dutch Alps of Venus, and wondered blasphemously how they had managed to crack the *Aardkin's* safe with neither torch nor explosive.

Glancing into the purser's office, he saw a queer, jagged hole in the big steel box, that looked more as if it had rusted or simply broken away than as if it had been cut. Then the freebooters were silently passing back to their vessel, having neither addressed nor molested officers, crew, or passengers.

Except, perhaps, for one: among the group of watchers was young Frank Keene, American radiologist and physicist returning from the solar-analysis station on Patrick's Peak in the Mountains of Eternity. He had edged close to the air lock, and now, as the departing marauders passed through, he suddenly leaned forward with narrowed eyes, and peered boldly into the cloudy visor of the guard.

"Hah!" he said. "A redhead, eh?"

The guard said nothing, but raised a steel-gauntleted hand. The metal thumb and forefinger bit viciously into Keene's sun-tanned nose, and he was thrust violently back into the crowd, with two spots of blood welling from the abused organ.

Keene grunted in pain. "O. K., fellow," he said stolidly. "I'll see you again some day."

The guard spoke at last in a voice that clinked out metallically from the helmet's diaphragm. "When you do, there'd better be two of you." Then this figure followed the rest; the outer

lock clanged shut; the magnets released the gangway's grip; and the *Red Peri*, agile as a swallow and swift as a comet at perihelion, flared into the black void.

Beside Keene sounded the voice of Captain Ten Eyck. "What a ship! Mynheer Keene, is that not a ship—that *Red Peri*?"

He was still exclaiming over it at intervals all during the laborious task of laying a new landing course; and when, an hour later, a blunt little League rocket appeared in answer to Hawkins' call, he informed its officer flatly that the pirate was hopelessly beyond reach. "Even if your fat *bêeste* of a boat could match its acceleration, which it couldn't."

OVER A YEAR LATER Frank Keene had almost completely forgotten the *Red Peri* and the red-headed pirate, though occasionally, during the interval, mention of the famous marauder had brought his experience to mind. After all, when a freebooter has scoured the skyways for nearly fifteen years without capture, he becomes something of a legend, a figure of heroic proportions. Papers and broadcasts give daily references to him, and he is blamed for, or perhaps credited with, many a feat performed by some less-celebrated desperado.

The lair of the *Red Peri* remained a mystery, though League ships scoured asteroids, the far side of the desolate Moon, and even the diminutive satellites of Mars. The swift pirate, striking invariably as his victim inched gingerly through some planet's gravitational field, came and went untouched.

But Frank Keene had little time at the moment for consideration of the famous freebooter. He and his companion, fifty-five-year-old Solomon Nestor of the Smithsonian, were out where few men had ever been, and in a predicament that was perhaps unique. They were dropping their rocket *Limbo* toward the rugged, black disk of Pluto,

two billion miles from home, and they were not happy about it.

"I tell you," growled Keene, "we've got to land. Do you think I'm settling on this chunk of coal from choice? We've got to make repairs. We can't navigate with one stern jet gone, unless you have a notion to fly in circles."

Old Solomon was a marvel on hard radiations, stellar chemistry, and astrophysics, but hardly an engineer. He said plaintively, "I don't see why we can't zigzag."

"Bah! I told you why. Didn't I spend five hours figuring out the time it'd take to reach the nearest inhabited place? That's Titan near Saturn, just one billion—one billion, I said—miles from here. And at the speed we could make zigzagging, because we couldn't keep a constant acceleration, it would take us just exactly four years and three months. We've got food enough for three months, but what would we live on during the four years? Atomic energy?"

"But what can we do on Pluto?" queried old Nestor. "And why didn't we carry a spare jet?"

"Jets aren't supposed to melt off," muttered Keene disgustedly. "As for what we can do, maybe we can find a virgin deposit of some refractory metal—platinum or iridium or tungsten, or any other with a high melting point—and build up a jet long enough to keep the blast from melting our stern away. Because that's what it'll do if we try running it this way."

"There's tungsten here," observed the older man hopefully, gazing down at the black expanse. "Hervey reported it, and so did Caspari. But there isn't any atmosphere, or rather, what there is is liquid or solid, except about half a centimeter's pressure of helium. Pluto has a diameter of about ten thousand miles, a surface gravity of about 1.2, and an albedo—"

"Not interested," grunted Keene, and

then, relenting, "Listen, Solomon, I'm sorry. I guess I'm taking it out on you because we had a defective jet. But it's a hell of a mess all the same, and somebody's going to suffer for it when we get back. With all the money the institute has, you'd think they'd be able to afford respectable equipment." He glared down through the floor port. "There she comes!"

With a rasp and a jar, the *Limbo* came to rest. Outside, a mixed column of dust and smoke billowed around the glasses, rose and then settled as quickly as a burst of sand, in the near vacuum that surrounded the ship.

Keene cut the blast. "Come on," he said, turning to a space suit swaying on its hook. "No use wasting time. We'll take a look around." He clambered into the heavy garment, noting irritably its greater weight on the surface of the black planet. The Plutonian gravitation added thirty-six pounds to his terrestrial hundred and eighty.

"No gun?" asked Nestor.

"Gun? For what? This planet's dead as the brain of whoever tested that jet. How can there be organic life in no air and ten degrees absolute?" He pulled open the inner door of the air lock. "Well," he said, his voice sharply metallic through his helmet's diaphragm, "here goes the Smithsonian Expedition for the Determination of the Intensity of Cosmic Radiation in Extrplanetary Space. We determined it all right; now the only problem of the expedition is to get home with our statistics." He flung open the outer door and stepped out on the black surface of Pluto.

SO FAR AS Keene knew, he was the fourth man and Nestor the fifth to set foot on the black planet. Atsuki, of course, was the first, if one credits his figures and photographs, the intrepid Hervey the second, and Caspari the third. Here on this lonely outpost of the solar system, high noon was hardly

brighter than full moonlight on Earth, and the queer, black surface that gives Pluto its low albedo made it seem still darker.

But Keene could distinguish the outlines of fantastic mountains beyond the hollow where the *Limbo* rested, and innumerable mysterious crags and hillocks, unweathered by wind or water, loomed closer. Directly to his right lay a patch of glistening, snowlike white; but he knew it wasn't snow, but frozen air. One dared not step in such a drift; for the cold would bite through his insulated space suit, since frozen air was a far better conductor of heat than the rocky ground.

Overhead glittered all the stars of the galaxy, as changeless as though he stood on a pleasant, green planet two billion miles sunward, for what was two billion miles to the infinite remoteness of the stars? The landscape was bleak, black, desolate, and cold. This was Pluto, the planet that circled at the very edge of the void.

The two started heavily toward a ridge where something glowed faintly that might be virgin metal. Strangely, their own footsteps were audible, for the substance of their space suits conducted the sound; but all else was a vast and ominous silence. They did not speak, for their suits, designed only for emergency repairs in space, had no radio; and to communicate it was necessary to touch hand or arm to one's companion; over such a material bridge, sound traveled easily enough.

At the ridge Keene paused, glowering down at a vein of bright, starlighted fragments. He placed a hand against Nestor's shoulder. "Pyritic," he grunted. "We'll have to look farther."

He turned right, treading heavily under nearly sixty pounds, suit included, more than his Earth weight. Surely, he mused, old Solomon Nestor wouldn't be capable of an extended search in such circumstances. He

frowned; Caspari had reported great quantities of heavy metals here, and they shouldn't need such a lengthy search. He stopped sharply; a stone came sliding past him on the rocky surface. A signal.

Off in the dusk Nestor was gesturing. Keene turned and hurried back, clambering along the uneven terrain with such haste that his breath shortened and his visor began to cloud. He clapped his hand on the old man's arm. "What is it?" he asked. "Metal?"

"Metal? Oh, no." Nestor's voice was triumphant. "What did you say about no organic life on Pluto, eh? Well, what about inorganic life? Look there!"

Keene looked. Out of a narrow chasm or cleft in the ridge something moved. For a moment Keene thought he saw a brook flowing, but a brook—liquid water—was an impossibility on Pluto. He squinted sharply. Crystals! Masses of crystals, gray-white in the dusk, crawling in a slow parade.

"I'll be damned!" he said. "Caspari didn't say anything about this."

"Don't forget," said Nestor, "that Pluto has thirty-six per cent more surface than the whole Earth. Not a ten-thousandth part of it has been explored—probably never will be, because it's such a task to get a rocket here. If Atsuki——"

"I know. I know," interrupted Keene impatiently. "But these things aren't tungsten or platinum. Let's move on." But he still stared at the crawling, faintly radiant mass. In the silence he heard infinitely faint rustlings, cracklings, and susurrations, transmitted through the ground to his feet, and thence to his helmet. "What makes them move?" he asked. "Are they alive?"

"Alive? I don't know. Crystals are as close as inorganic matter comes to life. They feed; they grow."

"But they don't live!"

OLD SOLOMON NESTOR was in his element now. "Well," he proceeded in professorial tones. "what is the criterion of life? Is it movement? No; for wind, water, and fire move, while many living forms do not. Is it growth? No; for fire grows, and so do crystals. Is it reproduction? Again no; for again fire and crystals reproduce themselves, if their proper food supply is present. Then just what differentiates dead matter from living?"

"That's what I'm asking you!" snapped Keene.

"And I'm telling you. There's just one, or perhaps two criteria. First, living things show irritation. And second, and more important, they show adaptation."

"Eh?"

"Listen," continued Nestor. "Fire moves, grows, feeds, and reproduces, doesn't it? But it doesn't run away from water. It doesn't betray the irritation life shows in the presence of a poison, though water's poison to it. Any living thing that encounters poison makes an attempt to throw it off; it develops antibodies or fever, or it ejects the poisonous matter. Sometimes it dies, of course, but it tries to survive. Fire doesn't."

"As for adaptation, does fire ever make a voluntary attempt to reach its food? Does it ever deliberately flee from its enemies? Even the lowest form of life known does that; even the miserable amoeba makes positive gestures of adaptation to its environment."

Keene stared more closely at the sluggish crystalline stream, which was now impinging on the black plain at his feet. He bent over it, and suddenly perceived a fact that had hitherto escaped him.

"Look here," he said, touching old Solomon's arm. "These things are organisms. They're not loose crystals, but masses of them."

It was true. The rustling crystals moved in glittering chunks from thumb-

nail size to aggregations as large as dogs. They crackled and rustled along, apparently moving by a slow shifting of the lower crystals, much as a snake moves on its scaly belly, but far stiffer and slower. Abruptly Keene sent his metal boot crashing into one. It shattered with a blue flash of released static electricity, and the pieces passively resumed their progress.

"They certainly don't show irritation," he remarked.

"But look!" shrilled Nestor. "They do show adaptation. There's one feeding!"

He pulled Keene a few feet down the ridge. There was a small bluish deposit of something that looked like frozen clay, a product, perhaps, of the infinitely remote past when Pluto's own heat had maintained liquid water and gaseous air to grind its rocks to powder. A crystalline mass had paused at the edge, and before their gaze it was growing, gray-white crystals springing out of it as frost spreads over a winter-chilled windowpane.

"It's an aluminium-eater!" shrieked Nestor. "The crystals are alums; it's eating the clay!"

Keene was far less excited than old Solomon, perhaps because he was considerably more practical. "Well," he said decisively, "we can't waste any more time here. We need refractory metal, and we need it bad. You try along the ridge, and I'll cross over." He broke off suddenly, staring appalled at the foot with which he had shattered the moving crystals. On its surface glittered a spreading mass of tiny, sparkling points!

A break in the surface of his space suit meant death, for the oxygen generator could certainly never maintain its pressure against any appreciable leakage. He bent over, scraping desperately at the aluminium feeders, and then realized that the infection would spread—had spread to his gauntlets. While Nes-

AST-1

tor babbled futilely and inaudibly behind his visor, Keene rubbed his hands in the gritty, pyritic soil on which he stood.

That seemed to work. The rough substance scoured away the growing crystals, and with frantic vigor he rasped a handful along his shoe. If only no hole, no tiniest pin prick had opened! He scoured furiously, and at last the metal surface showed scratched and pitted, but free of the growths. He stood up unsteadily, and placed his hand against the gesturing Nestor's side.

"Keep away from them!" he gasped. "They eat——"

Keene never finished his sentence. Something hard jarred against the back of his armor. A metallic voice clicked, "Stand still—both of you!"

II.

"WHAT the devil!" gulped Keene. He twisted his head within his immovable helmet, peering through the rear visor glasses. Five—no, six figures in blue metal space suits were ranged behind him; they must have approached in the inaudibility of a vacuum while he had been scouring his suit free of the crystals. For a moment he had an eerie sensation of wonder, fearful that he faced some grotesque denizens of the mysterious black planet, but a glance revealed that the forms were human. So were the faces dim in the dusk behind the visors; so had been the voice he had heard.

It sounded again. "Turn around and walk."

Keene hesitated. "Listen," he said. "We're not interfering with you. All we want is some tungsten in order to fix our——"

"Move!" snapped the voice, whose tones traveled through the weapon hard against Keene's back. "And remember that I'm two thirds inclined to kill you anyway. Now move!"

AST-2

Keene moved. There was little else he could do, considering the appearance of the threatening automatics in the hands of their captors. He tramped heavily along, feeling the thrust of the muzzle against his back, and beside him Solomon Nestor trudged with paces already showing the drag of weariness. The old man touched his arm.

"What's this about?" he quavered.

"How do I know?" snorted Keene.

"Shut up!" admonished the voice behind him.

They walked past the looming shape of the *Limbo*—five hundred feet past it, a thousand. Directly ahead was the other rim of the cup-shaped depression in which they had landed, high, black cliffs in fantastic shapes. Suddenly Keene started; what had seemed but a smaller cliff showed now as a skeleton, tetrahedral frame of metal, three webbed shafts rising to a point from a tubular triangle below.

"The *Red Peri*!" he gasped. "The *Red Peri*!"

"Yeah. Why the surprise?" queried the sardonic voice. "You found what you were looking for, didn't you?"

Keene said nothing. The appearance of the pirate ship had amazed him. No one had ever dreamed that the swift marauder could operate from a base as infinitely remote as the black planet. How could even that agile vessel scour the traffic lanes of the minor planets from dusky Pluto, two billion miles out in the empty cosmos?

To his knowledge only two ships—three, if *Atsuki* hadn't lied—had ever reached those vast depths before their own *Limbo*, and he knew what endless travail and painful labor each of those journeys had cost. In his mind echoed Captain Ten Eyck's words of a year and a half before. "What a ship!" he muttered. "Lord, what a ship!"

There was an opening in the cliff wall as they rounded the bulk of the *Red Peri*. Yellow light streamed out, and

he glimpsed an ordinary fluorolux bulb in the roof of the cavern. He was shoved forward into the opening, and suddenly his visor was clouded with moisture. That meant air and warmth, though he had seen no air lock, nor heard one operate. He suppressed the impulse to brush a metal-sheathed hand across the glass, knowing that he couldn't wipe the condensation away in that fashion.

The voice again, still queerly sardonic, yet somehow soft. "You can open your helmets. There's air."

Keene did so. He stared at the figures surrounding himself and Nestor, some still helmeted, others already removing the uncomfortable space suits. Before him stood a figure shorter than the rest, and he recalled the red-headed pirate on the *Aardkin*. The short one was twisting the cumbersome helmet.

IT CAME OFF. Keene gulped again at the face revealed, for it was that of a woman. A woman? A girl, rather, for she seemed no more than seventeen. But Keene's gasp was not entirely surprise; mostly, it was sheer admiration.

Her hair was red, true enough, if one could call red a lovely and subtle shade between copper and mahogany. Her eyes were bright green, and her skin was the silken, soft, and pale skin of one whose flesh is but seldom exposed to the sunlight, yet gently tanned by the violet-rich rays of the fluorolux.

She let the cumbrous metal suit clank away from her, and stepped out in the quite civilized garb of shirt, shorts, and dainty, laced buskins, such as one had to wear in a space suit. Her figure—well, Keene was only twenty-six, but even old Nestor's pallid eyes were fixed on her as she turned toward them. She was slim, curved, firm; despite her slowness, there was a litheness and sturdiness to her limbs, the result, perhaps, of a lifetime under the supernormal gravitation of Pluto.

"Take off your suits," she ordered coldly, and as they complied, "Marco, lock these up with the rest."

A tall, dark individual gathered up the clanking garments. "Yes, commander," he said, taking a key she held out and moving away into the cavern.

"Commander, eh?" said Keene. "So you're the Red Peri!"

Her green eyes flickered over him. She surveyed his own figure, which was still hard and brown and powerful from his swimming days at the university. "You," she said impassively. "I've seen you before."

"You have a good memory," he grunted. "I was on the *Aardkin*."

She gave him a momentary smile of amused remembrance. "Yes. Did your nose scar?" She glanced at the organ. "I'm afraid not."

People—two or three of them—came hurrying up the long corridor of the cave to stand staring curiously at Keene and Nestor. Two were men; the third was a pale, pretty, flaxen-haired girl. The Red Peri glanced briefly at them and seated herself on a boulder against the rocky wall.

"Cigarette, Elza," she said, and took one from the pale girl.

The scent of tobacco tantalized Keene, for such indulgences were impossible in the precious air of a space ship. It had been four months since he had smoked, in the frigid little town of Nivia, the city of snow on Titan.

"May I have one?" he asked.

The green eyes turned an icy glance on him. "No," said the Red Peri briefly.

"Well, I'll be—— Why not?" He was angered.

"I don't think you'll live long enough to finish it," responded the girl coolly, "and our supply is limited here."

"Yeah, limited to what you find on looted freighters!" he snapped.

"Yes," she agreed. She blew a tormenting plume of smoke toward him.

"I'll tell you what I'll do. I'll trade you a cigarette for the information as to how you managed to trace us here."

"Trace you?" he echoed, puzzled.

"That's what I said. It's a generous offer, too, because I'm quite capable of torturing the knowledge out of you."

Staring into her lovely, glittering green eyes, Keene was not disposed to doubt her capability. He said mildly, "But we didn't trace you here."

"I suppose," she retorted, "that you came to Pluto looking for a good business corner. Or perhaps on a little camping trip. Is that your story?"

HE FLUSHED under her cool insolence. "We came here by accident," he growled. "One of our afterjets melted off, and if you don't believe it, go look at it."

"Jets don't melt unless they're planned to," said the Red Peri coldly. "And what were you doing in the neighborhood of Pluto anyway? And I suppose that out of all the millions of square miles of surface, you just accidentally picked this valley as a landing place. Well, it won't do you any good to lie, because you're going to die regardless, but you might die a little less painfully if you tell the truth."

"It just happens that I'm telling the truth!" he blazed. "Whether you believe it or not, we landed in this valley by pure chance. We're the Smithsonian's expedition to study cosmic rays in outer space, and you can verify that by our clearance papers from Nivia."

"A good disguise for the secret service," she sneered. "You could get any sort of government papers you want, couldn't you?"

"Disguise! Listen, if we were hunting the Red Peri, do you think we'd come armed with cameras, interferometers, electroscopes, polariscopes, and fly-wing bolometers? Search our ship; you'll find one gun in it—one measly automatic. I'll tell you where it is. It's

in the upper right-hand drawer of the navigation table. And we landed here because Pluto was the nearest solid place to where we burned off our jet—and that's the truth!"

The Red Peri's glance was faintly speculative. "I don't see," she said thoughtfully, "that it makes much difference. If you're telling the truth, it simply means that you're a very unlucky expedition, because I certainly can't let you go, and I haven't any particular desire to keep you here. In other words, it still looks very much as if you were destined to die." She paused. "What are your names?"

"This is Smithsonian's Professor Solomon Nestor," he said, "and I'm Frank Keene, radiation engineer."

Her green eyes shifted to the old man. "I've heard of Solomon Nestor," she observed slowly. "I really shouldn't like to kill him, but I don't see exactly what other course is open." She flashed her gaze back to Keene. "Do you?" she asked coolly.

"You could take our words not to give out any information," he grunted.

She laughed. "The Red Peri trusts very little to promises," she retorted. "Anyway, would you give your word to that?"

For a full half minute he stared into her mocking eyes. "I wouldn't," he said at last. "When I entered the Smithsonian's service I took their usual oath to uphold the law in the far places. Maybe many of their explorers consider that oath just so many words; I know some of them have found wealth at the expense of the institute. But I keep my oaths."

The Red Peri laughed again. "No matter," she said indifferently. "I wouldn't trust my safety to any one's word. But the question of your disposal still remains." She smiled with a faint hint of malice. "Would you prefer to die instantly, or do you think you can stand the torture of suspense while

I check your story and think it over? Because frankly, I think it will be necessary to kill you anyway. I see no alternative."

"We'll wait," said Keene stolidly.

"Very well." She flipped away the stub of her cigarette, crossed her dainty legs, and said, "Another, Elza."

Keene looked sharply at the yellow-haired girl as she held a light to the cigarette. There was something dimly inimical in her manner, as if she were struggling to suppress a hatred, a hidden enmity. She withdrew the flame with an abrupt, irritable gesture.

"That's all," said the green-eyed leader. "I'll lock you up somewhere until I'm ready."

"WAIT A MINUTE," said Keene. "Now will you answer a few of my questions?"

She shrugged. "Perhaps."

"Are you the only Red Peri?"

"The one and only," she smiled. "Why?"

"Because you must have been born like Lao-tse at the age of eighty, then. These raids have been going on for fifteen years, and you're not a day over seventeen. Or did you start your career of piracy at the age of two?"

"I'm nineteen," she said coolly.

"Oh. You began at four, I suppose."

"Never mind. Any further questions?"

"Yes. Who designed your ship, the *Red Peri*?"

"A very clever designer," she said, and then murmured softly, "A very clever one."

"He must have been!" snapped Keene angrily.

"He was. Have you anything else to ask?"

"You haven't answered one question so far," he growled. "But here's another. What do you think will happen when the *Limbo* doesn't arrive in Nivia when due? Don't you know that the

next government rocket will be out to look for us? And don't you realize that they'll look for us first on Pluto? Your base here is bound to be discovered, and if you murder us it'll go just that much harder with you."

The Red Peri laughed. "That isn't even a good bluff," she said. "Titan isn't a quarter of the way between the Earth and Pluto, and it's getting farther from us every day. The next conjunction of Saturn and Pluto is fifty years in the future, and about the only time your clumsy rockets can make the jump is at conjunction. You ought to know that."

"And what's more, by the time you're missed, there won't be a thing to do but give you up as lost, and you'll not be the first Smithsonian expedition to be lost. And finally, if they did send out a searching party, how would they expect to find you? By blind reckoning?"

"By radio!" grunted Keene.

"Oh. And have you a radio on the *Limbo*?" she asked gently.

He groaned and subsided. Of course there was no radio on the little expeditionary rocket; all its precious space was occupied by fuel, food, and necessary equipment, and besides, what possible use could a radio be to explorers out in the lonely vastness of extraplanetary space? The nearest settlement, Nivia on Titan, was hundreds of millions of miles beyond range of the most powerful beam yet developed.

The Red Peri knew as well as he how utterly hopeless was the expectation of any search for himself and Nestor. They'd be simply given up, called martyrs to science, regretted by the few experimenters who were interested in their results, and then forgotten.

"Any more questions?" asked the flaming-haired one mockingly.

Keene shrugged, but suddenly and unexpectedly old Solomon Nestor spoke. "That entrance," he squeaked irrelevantly, pointing to the arch of the cave.

"How do you keep the air here from rushing out?"

Keene whirled and stared in amazement. It was true; the cave was open to the frigid, airless outdoors; he could see the dusky Plutonian twilight through an unglassed, unblocked archway.

"At least that question is sensible," said the Red Peri. "We do it with a field."

"A field!" echoed Keene. "What sort——"

"You've asked enough questions," she cut in tartly. "I answer no more." She turned. "Elza, take these two into any unoccupied room with a metal door. If they're hungry, send them food. That's all."

SHE ROSE without a glance at the prisoners. Keene's eyes followed the exquisite grace of her figure as she trod as lightly as if she walked an Earthly corridor, followed by the five men who remained. Her radiant hair glowed far down the length of the passage until she turned aside and vanished.

He and Nestor followed the flaxen-haired Elza; and behind them, grimly silent, came the two men who had first appeared with her. She led them past a number of niches, side aisles, and several obviously artificial chambers. The cavern seemed to stretch indefinitely into the depths of the Plutonian mountain, and was indubitably a natural cave, though here and there the floor or walls showed signs of human workmanship. At last the girl indicated a chamber to the right, and they entered a small room, furnished comfortably enough with an aluminium chair, a table, and two couches. These last were covered with deep and gloriously beautiful brocades, beyond doubt plunder from some freighter's cargo.

"This is yours," said Elza, and turned toward the door. She paused. "Are you hungry?" she asked.

"No," said Keene. He saw the two

men standing in the corridor, and lowered his voice. "But will you talk to us a while, Elza? Alone?"

"Why?"

"I'd like to ask you something."

"What is it?"

He dropped his voice to a whisper. "You hate the Red Peri, don't you, Elza? As much as we do?"

She turned abruptly to the door. "Father," she said evenly, "will you and Basil bring something to eat? I'll stay here; you can bolt the door on us."

There was a murmur without.

"Hush!" she said. "You heard. These two are gentlemen." The door closed and she faced them. "Well?"

"Can we be heard here?" asked Keene, glancing around the rock-walled chamber.

"Of course not. The Peri has no need to spy on her followers. She's clever enough to read men's feelings in their glances and the tone of their voices."

"Then she must know you hate her, Elza."

"I haven't said that I hate her."

"But you do. Does she know it?"

"I hope not."

"But you just said that she could read——"

"I said men," cut in the flaxen-haired girl.

Keene chuckled. "Why do you hate her, Elza?"

Her blue eyes hardened. "I will not say."

"Well, it doesn't matter, I suppose." He shrugged. "Elza, is there any chance of our escaping? Would you help us to—say, to steal the *Red Peri*? Our own ship's useless."

"They've gone to repair it. As for the *Red Peri*, I don't think you could operate it. It doesn't control like your rocket. I don't know how to run it."

"I could make a good try at it," said Keene grimly. "It would have to be the *Red Peri* anyway. They could run

the *Limbo* down in three hours and blast it." A thought struck him. "Unless we could cripple the *Red Peri* first."

"I don't see how you could," said Elza. "She has the key to it hidden somewhere. And how could you even reach it? The space suits are locked up, too. You can't even step beyond the entrance."

That brought a new thought. "How do they seal the air at the entrance, Elza?"

"I don't understand how."

SOLOMON NESTOR spoke. "I know that. She said they used a field. She meant——"

"~~That~~ mind now," said Keene. "Elza, are there any others here that might—well, side with us against the *Peri*?"

"No men. All of them worship her and"—her face darkened—"half of them love her."

"For which you can hardly blame them," muttered Keene. "She's about as lovely a female devil as you'd find this side of hell. Still, one would think she'd have some enemies, if only because of her cruel nature."

"She isn't cruel," said Elza reluctantly. "She's ruthless and arrogant and proud, but she isn't cruel—not exactly. I don't think she really enjoys torture."

"Well, her green eyes look cruel enough. Say, Elza, that dark fellow she called Marco. What of him?"

The girl flushed. "He's Marco Grandi. Why do you ask me about him?"

"Because he looks like a sly, calculating, shrewd customer, and there's a big reward for the *Peri*. I thought we might work on him."

Elza's flush darkened to anger. "He's—he's wonderful!" she blazed. "And if you think money would tempt him—or any of us—you're wrong. Each of

us has a dozen times the amount of the reward."

Keene saw his error. "I'm sorry," he said hastily. "After all, I just caught a glimpse of him." He paused. "Does he, by any chance, love the *Red Peri*?"

She winced. "He's no different in that way than the rest."

"I see. But you—perhaps—wish that he were different—in that way?"

Elza brushed a white hand across her face. "All right," she said sullenly. "I love him. I admit it. That's why I hate her. He's dazzled; he thinks she'll learn to care for him; he can't see how utterly heartless and indifferent she is. That's why I'll do whatever I can to hurt her, but nothing to endanger him. If I help you, you must swear to protect him. If you escape, you must swear to that."

"I'll swear to it, but—can you help us?"

"I don't know. I'll try. I don't think she really wants to kill you, or she'd have blasted you there in the corridor. It isn't her way to hesitate and temporize and think things over. But you are a problem to her."

"That's good news," said Keene. "Say, how many residents are there in this pirate's paradise?"

"A hundred and five, including the children."

"A hundred and—— Lord! This must be a pretty well established colony. How old is it?"

"Sixteen years. Her father built it, and it's almost self-supporting. There are gardens off on the side passages." She frowned. "I've lived here since I was four. I'm twenty now."

"And have you never seen the Earth?" Keene saw a chance now to offer more tangible inducement for aid. "Elza, you've missed the most glorious planet in the system—green fields and white snow, great cities and rolling, blue oceans, life, people, gayety——"

"I went to school there for five years, at *Gratia*," she interposed coolly.

"Don't you suppose we all visit there? Only of late the Peri has refused to let me go. I—I suppose she suspects."

"If we escape," said Keene softly, "you'll be free to live there forever. There will be life and happiness for you, Elza, once this pirate queen is taken and her band destroyed."

"Destroyed?" Her face paled again. "Not Marco. Not my father or my brother Basil. You promise me that. Promise it!"

"I'll promise. All I want is to bring the Red Peri to justice. I don't care about the rest, but"—he rubbed his nose—"I've a little score to settle with her. Just the Red Peri herself."

A knock sounded. "Elza!" came a voice.

"Yes, father. Unlock the door and I'll take the tray." She turned.

"But you'll help?" whispered Keene. "With the Red Peri gone, you and Marco—do you understand, Elza? Will you help—just against her?"

"To my last breath!" she whispered.

III.

KEENE woke with a sense of unaccustomed luxury, and for a moment was at a loss to account for it. Then he realized that it was the sweetness of the air, strange to his nostrils after so many months of an atmosphere that, despite the hard-working rectifiers of the *Limbo*, was anything but sweet. He wondered casually where the Red Peri secured her colony's supply of oxygen.

The Red Peri! He sat up sharply at the memory of the fantastically lovely pirate princess, for despite the reassurance of the girl Elza, he mistrusted the intentions behind the Peri's mocking, green eyes. He rose, fumbled for the light switch, and glanced at his wrist watch. Though night and day were one in the cavern, he perceived that Pluto's ten-hour night was past. and that what-

ever daylight the black planet enjoyed was trickling over it.

Old Nestor still slept. Keene pulled a hanging aside and found water in a tiny pool; he bathed and pulled on the shirt, shorts, and shoes that were the only clothing he possessed. He ran his hand over his sandy, one-day beard, but his razor was inaccessably remote on the *Limbo*. Then he turned to see old Solomon's pale-blue eyes blinking at him.

"Morning," he grunted. "Glad to see we weren't murdered in our sleep by our pleasant hostess."

Solomon Nestor nodded. "I haven't slept so well since we left Nivia," he quavered. "Fresh air is a blessing."

"Yes. Wonder where she gets it."

"Mines it, I don't doubt," said Nestor. "There are millions of tons of it frozen out on the surface."

"That's true."

"And," continued the old man, "did you notice anything queer about it?"

"No, except that it smells good and fresh."

"I did. When that yellow-haired girl—Elza—lighted the Peri's cigarettes, did you notice the cast of the flame? Purple, distinctly purple."

"So what?"

"Why, it means neon. Nitrogen is scarce here; Hervey and Caspari both said that, and so they use neon as their filler. No one can breathe pure oxygen, and neon is a good substitute for nitrogen, nearly the same density, and absolutely inert and nonpoisonous. That's important to remember. It may help us."

"Help us?"

The old man waggled his head. "You'll see."

"Say," asked Keene suddenly, "what is the explanation of the cave entrance? We walked right through it—vacuum on one side, air on the other. She said they did it with a field—remember?"

"I remember. She meant an electrostatic field. You know that like charges

repel, and the molecules of air, battering against the field, acquire the same charge. They're repelled; they can't cross the field. It's like the electric wind from a static discharge, but here the kind that tries to blow in just balances the wind that tries to go out. Result, no wind either way."

"But we walked through it. Motion through a field produces a current. I didn't feel any."

"Of course not. You didn't walk through at a mile per second like a gas molecule, did you? Whatever current your motion produced was instantly grounded through your body and space suit, which are conductors. Air at normal pressure is a very poor conductor, so it retains its charge. Gases do retain static charges, as witness ball lightning."

"I see," muttered Keene. "Clever. Better than an air lock as far as convenience goes, though heat must radiate away through the field. But if they use atomic heat, they can afford a little waste."

"There'd be less loss there," said Nestor, "than to the rock walls. Heat could radiate, true enough, but it couldn't escape by conduction. A vacuum is the best heat insulator there is; look at our thermos containers on the *Limbo*. Radiation at temperatures below red heat is a very slow process. And remember that, too."

"I will," grunted Keene, "but right now I'm remembering that we have had no breakfast. Do you suppose her method of execution is slow starvation?" He strode over to the door and pounded vigorously on it. "Hey! Hey, out there!"

THERE WAS no response. Irritably, he seized the knob and rattled it, and almost fell backward as the door swung smoothly open. It was unbarred!

"I'll be hanged!" he exploded. He peered into the deserted corridor. "Do you suppose this is Elza's doing?"

"If it is, it's not much help," said old Solomon.

"No. All the same, I'm going to take a look around. Come on; perhaps we can find some space suits."

"You'd need the key to the *Red Peri*, too, or at least the key to the *Limbo*, if they've locked it. I think"—old Nestor's brow wrinkled—"I'll sit right here and figure out something I've been thinking of. Even old-heads sometimes get ideas."

"Suit yourself," grunted Keene, with very little faith in the potential ideas of the impractical old scientist. He strode boldly into the passageway.

There was no one visible. He turned left and proceeded toward the entrance to the cavern. Ahead of him a figure came suddenly out of an aisle—a feminine figure. He recognized the girl Elza, carrying a bright aluminium spade, and called her name softly.

She turned. "Hello," she said briefly, as he fell into step beside her.

"Been burying some pirate treasure, Elza?"

"No. Just some seeds in the garden."

"Did you unlock our door?" he asked.

"I? Yes. The *Peri* ordered it unlocked."

"Ordered it! Why?"

"Why not? Can you escape from here?" She gestured at a massive metal door as they passed. "Behind that is her room, and behind another within it are the space suits and the keys to both ships. You're as much a prisoner as ever."

"I know, but isn't she afraid—well, of violence? We could kill her."

"She isn't afraid of anything," said Elza. "Anyway, what good would killing her do? It would be simply committing suicide."

"That's true," said Keene. They were approaching the entrance with its invisible electrostatic seal; now they stood staring out over the dismal, black, airless Plutonian valley, where a thou-

sand feet away was the dark cylinder of the *Limbo*. Suddenly a flare of light appeared beside it, flashed a moment, then vanished.

"What's that?" he asked sharply.

"Father's out there welding your jet. She thinks she may have a use for your ship."

"For what?"

"I don't know. It has exactly the lines of a League guard rocket. Perhaps she plans to use it as a decoy."

"And perhaps," said a cool voice behind them, "as a flying mausoleum with you two among the occupants."

They whirled. The Red Peri was approaching with her steps muffled by the soft buskins on her feet; beside her stalked Marco Grandi. Keene did not fail to note Elza's flush as she met the gaze of the dark man, but he felt a surge of anger at himself as he realized that his own face was reddening under the green eyes and mocking smile of the red-haired girl. He spat angrily, "You're a pleasant player when you hold all the cards!"

She said only, "Have you eaten breakfast?"

"No!"

"Well, perhaps that explains your ill temper. Elza, go order a tray for two sent to my room, and one to Professor Nestor. And you, Marco—suppose you leave me."

"Here with him?"

SHE LAUGHED and tapped an automatic at her belt. "I can take care of myself. Do you doubt it? You can go, Marco."

He muttered, "Yes, commander," and backed reluctantly away. The Red Peri turned her glorious, taunting eyes on Keene, smiled again, and said, "I've checked over your ship. Your story's straight enough."

"Well? What about us, then?"

"Oh, I haven't decided. You may have to die; it's more than likely that

you will, but with no malice on my part. Purely as a matter of convenience, you understand."

He grunted. "Why'd you have our door unlocked?"

"Why not? I'm sure you can't escape. Look here." She took the bright aluminium spade Elza had placed against the wall, and thrust it half through the field into the airless outdoors beyond. He stared at it; except for a slight change in color as its crystals rearranged under the slow radiation of its heat, it seemed unaltered. When the knuckles of her dainty hand began to whiten with the cold of the metal, she tossed the implement on the floor at his feet.

Now it changed. Instantly white frost formed on the part that had been exposed; glittering crystals grew an inch thick, fuzzy covering, and began to spread along the handle. They sprang out as swift as the second hand on a watch, an inch—two inches deep.

The Peri laughed. "Would you like to stroll outside?" she gibed. "It's not cold—just ten above zero. Above absolute zero, I mean. Cold enough to liquefy and freeze all gases but hydrogen and helium. How long do you think it would take to freeze that hot blood and hotter head of yours?"

"Bah!" he said. "What's to keep me now from overpowering you, dragging you into some room, and using you as hostage to bargain for our safety?"

"If you could," she retorted coolly. "Even then it would be a poor idea; if you killed me your own death would follow very soon and very painfully; if you didn't, I'd never be bound to any promises you wrung from the others. Your wisest course is to leave things as they are until I decide what to do with you. And incidentally," she added, with a narrowing of her green eyes, "don't pin your faith on Elza."

"On—Elza?" He was startled. "What do you mean?"

"Oh, I know she hates me. She's in love with Marco, or fancies so. I amuse myself by tormenting her, and I suspect that she'd go to some lengths for revenge, but she's quite as helpless as you. As a matter of fact, I'm doing her a good turn, for Marco is not particularly honorable. So I save her and insure his loyalty to me, all with one stroke."

"You—devil!" Keene gasped. "If there's one thing I'd like above all else, it's to drag you to justice. Ever since that day on the *Aardkin*—"

"When I pinched your nose?" she queried sweetly. "Here, then." With a rapid snap of her hand she twisted the same member with painful violence, laughed into his exasperated face, and turned away. "Come on," she ordered. "Here's breakfast."

"I'll be damned if I'll eat with you!" he snarled.

She shrugged. "As you like. This is all the breakfast you'll get, I promise you."

After all, breakfast was breakfast—he growled and followed her to the massive metal door; as it swung open he forgot a part of his anger in sheer amazement at the luxury of her chamber. She had, apparently, culled the prize plunder of a score of raids to furnish this room. There were deep, silken rugs on the floor, rich tapestries, paintings from the salon of some luxurious Venusian liner, delicately worked aluminium furniture, even a carved mirror whose utter perfection must have originated in the incomparable lost art of Mars.

THE MAN who bore the breakfast tray placed it silently on a table and withdrew. Here was another surprise. Eggs! And fresh ones, too, judging by the smell.

"Oh, we have a few chickens," said the Red Peri, reading his glance. "Enough to supply me, at least. Feeding them is rather a problem, you see."

Keene remembered his anger in time a reply with an irritable "humph!" For a moment he wondered why the exquisite presence of the Peri should affect him so violently, for he realized that much of his irritation was directed at himself. But of one thing he was certain, and that was that his most ardent desire was to humble the arrogant, self-sufficient, proud, and mocking pirate princess, to see her pay the assigned penalty for her crimes.

Then he frowned. Was he anxious to see her punished? What he really wanted was simply to see her arrogance and insolence humbled, to see her—well, frightened, or pleading with him, as a sort of recompense for the contemptuous way in which she treated him.

She spoke. "You're a silent table partner," she observed, "and yet I'm rather glad you two blundered in. I was getting frightfully tired and bored; I was considering paying a little visit to civilization."

"I suppose you realize," he growled, "that if we ever get back to Earth, your little visits are over. I'd be very glad to furnish a full description of the Red Peri."

"And do you think I'm the only red-head alive?"

"You're probably the most beautiful, and you know it."

She laughed contemptuously. "Keene, if you think you can play the sophisticated giver of compliments to my innocence, think again. I've been around. I've spent enough time in London, Paris and New York to know the social game. In fact, I have a carefully built-up identity there; my terrestrial friends think I live on Venus. So don't try what the New Yorkers call a fish net on me."

Her words gave him an idea. "Fish net?" he echoed with a deliberate air of sadness. "No. It's just that I have the misfortune to be about half in love with you, while the other half is pure hatred."



With a sudden lunge he sent her and himself staggering, unarmored, into the airless Plutonian plain.

Suddenly he wondered how much of a lie that really was.

She laughed again. "I half believe you."

"Which half?"

"Never mind. But," she added derisively, "whichever half it is, remember that it takes a better man than you to win the Red Peri's love."

"I didn't say I wanted it!" he snapped. "All you are to me is a vicious law breaker, and all I want is the chance to see you taken."

"Which you'll never have," she returned coolly. She leaned back in her chair and slipped a cigarette from a box. "Smoke?" she asked.

It was in the nature of a peace offering. He accepted both the truce and the cigarette, and puffed with thorough enjoyment.

"Keene," said the Peri, "would you like to see our establishment?"

He nodded. If the girl were proffering friendship, or at least tolerance, he was in no position to refuse it while she held the upper hand. But he would not accept it under false colors.

"Listen," he said, "there are lots of things I like about you. You've plenty of courage, and you've the devil's own beauty. But get this. If I see any chance to escape or any chance to capture you, I'm taking it. Is that plain?"

She nodded. "Keene, if you ever outwit the Red Peri, you're welcome to your winnings. But you never will."

She rose, and he followed her into the stone-walled corridor, glancing briefly at the mysterious archway with its invisible electrostatic seal.

"If your power ever failed," he said, "what would happen to your air here?"

"It won't fail. It's generated directly from disintegration. No moving parts at all. But if it should"—she gestured to the cavern roof—"there's an emergency air door. It will close instantly if there's any appreciable outward current. There's plenty of power to re-

tain our atmosphere; we only keep a pressure of eleven to twelve pounds."

"About the same as the altitude of Denver," he muttered as he followed her. "Prepared for anything, aren't you?"

HE WAS really impressed by the neat little gardens in the side aisles, raised on Plutonian soil carefully selected from the proper elements. "But nitrogen is a troublesome job," she explained. "There's little of it to be had, and what there is is all mixed with frozen argon. We fractionate it, and then form ammonia, and so finally get it into usable form."

"I know the process," he said.

They penetrated deeper into the series of caverns that pierced the black Plutonian mountain. The fluorolux lights were fewer now, and there were long stretches of dim side passages with no lights at all.

"They're sealed off," said the Peri. "We're approaching the seal of the main cavern now. Do you see where it narrows ahead there? That's an electrostatic seal, but the side passages are blocked with concrete to keep out the crystal crawlers."

"The crystal crawlers!" echoed Keene. He had almost forgotten those curious creatures of the Plutonian valley. "Why don't they come through the electrostatic seal?"

"They do, but they seldom get far. You'll see why."

"What are the things?" he asked. "Are they alive? No one—Atsuki or Hervey or Caspari—ever reported them."

"I think they originated in these caverns. This whole region is honeycombed, and those in the valley are just strays. Explorers wouldn't be apt to encounter them."

"But are they alive?" he persisted.

"No-o-o," said the Red Peri slowly. "Not exactly alive. They're—well—on

the borderline. They're chemical-crystal-line growths, and their movement is purely mechanical. There are half a dozen varieties—aluminium feeders and iron and silicon and sulphur feeders, and others." She smiled impishly. "I have a use for at least one sort. Do you remember, or did you notice, the safe of the *Aardkin*? An iron feeder comes in very handy at times."

He grunted; somehow it pained him to hear the girl refer to her piratical activities. Before he could make any other reply they came suddenly into a large, natural cavern beyond which showed the narrow opening which the Peri had indicated as the place of the electrostatic seal. A single light shed a dim radiance from far above, and in the faint luminosity he perceived a narrow, deep gash, a gorge or pit, that crossed the chamber from wall to wall and even split the walls in dark tunnels to right and left.

"Here is our crawler trap," said the girl. She indicated a curious span across the chasm, a single heavy girder of metal that bridged the twenty-foot gap in four sharp zigzags. A precariously narrow bridge; the girder was no more than twelve inches in width.

"Copper!" he said.

"Yes. Apparently there are no such things as copper feeders to destroy our bridge. Do you see how the trap works? The crystal crawlers have no eyes nor sense of touch; they just crawl. The chances are infinitely against any of them moving at the proper angles to cross the gap. They go crashing down and crawl away below; although one blundered across once.

"Most of them aren't dangerous except to whatever they feed on." She gestured. "Beyond the seal is our air supply. There's a regular frozen subterranean sea of neon, argon, and oxygen, and we can draw on it almost forever. Don't you want to cross over and look at it?"

Keene stepped to the brink of the chasm and peered down. It was deep; the light from above trickled away into a mysterious darkness where only a few faint sparkles responded—crystals, doubtless, for a slow flicker of movement showed. He scowled at the precarious slenderness of the copper zigzag, and then, cautiously, he abandoned dignity, dropped to his knees, and crept slowly across on all fours.

It was only when he reached the far side and stood erect that he became conscious of the Peri's contemptuous sniff of laughter, and turned to see her walk casually and steadily across the angling span, balancing as easily as if she trod a wide roadway. He flushed a slow red; the girl had nerves of steel, true enough, but he realized she had done this as a deliberate taunt.

She strode to the narrow opening, where he now perceived the ring of copper points whence issued the electrostatic field, and above, on the roof, a suspended emergency lock like that at the outer arch.

"There," she said, pointing. "You can see it."

He squinted into the darkness. A dozen feet away, the passage seemed to widen again, but into such a vast hollow that the light from behind him failed utterly to show its bounds. But dimly and faintly as a sea of ectoplasm, he made out a shimmering, illimitable expanse of white, a vast subterranean drift of Pluto's fossil air.

"There goes the pipe to it," said the Peri. "We can get all we need by the simple process of heat, but now and then we have to lengthen the pipe. That's why this end of our colony is sealed by electrostatic. Oh! O-o-oh!"

She broke off in a startled scream. Keene whirled; the cave floor between the two of them and the bridge was covered with a rustling, irregular parade of blackish crystals!

"What's the matter!" he gasped.

"We can kick them aside." He moved as if to do so.

"No!" cried the Peri. She seized his arm, dragging him back. "They're carbon feeders! Don't you understand? They're carbon feeders! Your body has carbon. They're—— Look out!"

IV.

KEENE started back, realizing that a gray-black, flat-crystallized, dully shining lump was almost at his feet. He stared at the crawling masses; they had come, apparently, from beyond a jutting wall of rock to his right. The floor was speckled everywhere with them, and now and again one slipped with a faint tinkle over the edge of the central pit. But there were hundreds more; one couldn't wait here until the floor had cleared. He skipped aside; another had silently approached almost to his feet.

He acted. Suddenly he seized the Peri, raised her bodily in his arms, and dashed in an angling, irregular course for the bridge. The girl squirmed and said, "Put me——" Then she lay very still as he picked his way as delicately as a dancer, sidestepping, skipping, twisting, to the copper span—and over it. Half running, he took the four sharp angles, and at last, breathless, he set the Peri on the rock of the far side.

She looked coolly up at him. "Well!" she said calmly. "Why did you do that?"

"That's pretty thanks for it!" he snapped.

"Don't you think I could have done as well?" she retorted. "I asked you why you did it."

"Because——" He paused. Why had he done it? He suddenly realized that he had no desire to see the exquisite Peri die. To see her humbled, yes. Even to see her punished—but not to see her die. "It was pure impulse," he finished grimly. "If I'd thought a second or two, I'd have left you to die."

"Liar!" she said, but smiled. "Well, I thank you for your intentions, though I could have done quite as well alone. But you're very strong, and—Frank!" Her voice rose. "Your foot! Your shoe! Quickly!"

He blinked down. Scarcely visible on the leather, a grayish-black coating of crystals was spreading, and almost immediately came a prickling pain in his toe. With a growling oath he kicked violently. The skin buskin went sailing in an arc over the pit, to fall squarely among the crawlers. Instantly it was a fuzzy mass of needlelike crystals.

The Peri was on her knees. "Your toe!" she wailed. Swift as a serpent she planted her own dainty foot firmly upon the arch of his. From somewhere she snatched a tiny, jeweled penknife, its blade flashing sharp as a razor. Still resting her full weight on his foot, she cut.

Despite his bellow of pain and surprise, she sliced away half his toenail and a goodly strip of skin beneath, kicked the bloody strip into the pit, examined her own pink toes for a moment, and faced Keene. For the first time in their acquaintance she seemed shaken; her wild, green eyes were wide with concern.

But it passed instantly. "Fool!" she snapped. "Fool!"

He was staring aghast at his bleeding toe. "Good Lord!" he muttered. "That was a narrow escape. Well—I'm not so sparing in my thanks as you. I say thanks for it."

"Bah! Do you think I want carbon feeders on this side of the pit? That's why I did it!"

"You could have pushed me into the pit, then," he retorted.

"And I wish I had!" she snapped. She turned abruptly, and padded, barefooted, up the cavern toward the colony.

Keene shifted his remaining buskin to his injured foot and limped after. He was in a turmoil of emotions. There

was something splendid about this pirate princess, something more than the simple fact of her exquisite and fantastic beauty. He swore angrily to himself for even admitting it, but limped hastily until he caught her.

"What's your name?" he asked abruptly.

"If you need a name to address me," she said coldly, "let it be commander."

"The only person I'll call commander is one I'm willing to serve, and that'll never be the Red Peri."

SHE GLANCED sidewise at him. "What's a name, anyway?" she asked in altered tones. "See here. You're Frank Keene, but you're neither keen enough to outwit me nor frank enough to admit you love me."

"Love you!" he snorted. "Love you! Why——" He broke off suddenly. "Even if it were true," he went on, "do you think I'd have anything to do with a pirate, a murderess? However I felt, I'd still exert every effort to bring you to justice. How many deaths have you caused? How much suffering?"

"I don't know," she said. "But—murder? I never killed anybody except in sheer self-defense."

"So you say. What about the atrocities on the *Hermes*?"

She looked up at him. "Frank," she said softly, "I had nothing to do with the *Hermes*. Don't you realize that people blame everything on the Red Peri? Every captain who suffers from some sneaking little freebooter blames me for it. Why, I'd need a hundred ships to commit all the crimes they've pinned on me."

"But you're a pirate, nevertheless."

"Yes, but I have my reasons. I have, Frank. And—— Oh, why should I justify myself to you, anyway? I don't care what you think of me."

"All the same," he growled, "I'll tell you what I think. I think your parents should have given you a series of good

lickings. You're nothing but a spoiled, reckless, dangerous child."

"My parents," she echoed.

"Yes. Do you think they'd be proud of you now?"

"I hope," she said slowly, "that one of them would." She paused at the door of her chamber, unlocking it. "Come in here," she ordered sharply.

He followed her into the lavish interior. She disappeared into an adjacent room, returning in a moment with a bottle and a strip of gauze. "Here," she said. "Dress your toe."

"It's nothing. It needs no dressing."

"Dress it!" she snapped. "I want no cases of infection here."

"I might"—he observed as he took the bottle—"die of the infection and thus save you a murder."

Her green eyes seemed to soften. "Remember this, Frank," she said in a low voice. "I could have let you die back there at the edge of the pit. I could have, but I didn't."

He had no answer. For a moment he gazed thoughtfully at the exquisite delicacy of her face, and then, irrelevantly, he asked again, "What is your name?"

She smiled. "Peri," she said.

"Really? Peri what? That's a strange name."

"Yes. It's the Persian word for imp or elf."

"I know. I've worked in Iraq. But it means more than just that; it's the name given to the child of a disobedient angel, waiting to be admitted into paradise."

Her features grew suddenly wistful. "Yes," she murmured. "Waiting to be admitted into paradise."

"But Peri what?" he repeated.

She hesitated. "If I told you," she said slowly, "you might understand. I think I will tell you, Frank. Did you ever hear of Perry MacLane?"

He frowned. "Perry MacLane," he muttered. "I—think so. Wait a min-

ute. Do you mean Red Perry Maclane, the inventor who had the famous legal battle with Interplanetary? But that was years ago, years and years. I was a child of seven or eight; you must scarcely have been born."

"I was just born. Perry Maclane was my father."

"RED PERRY your father? And—the ship! I see—*Red Peri*, named after him."

"Named by him, after me. He built it. He built it purposely to be a pirate craft, and you can't blame him!"

"Can't blame him! Why not?"

"Listen to me, Frank." Her glorious eyes were intense and serious. "Perry Maclane was robbed by Interplanetary and their associates. Do you know how dangerous space travel used to be, twenty-five or thirty years ago? Even fifty years after the first colonies were founded on Venus, it was a gamble with death to travel there.

"Trade was all but impossible; because the rocket blasts kept failing, and ships kept crashing in trying to land, or even plunged into the Sun. And then the thermoid expansion chamber was developed; the blasts became steady, safe, usable. Trade was possible, and Interplanetary became an enormous, wealthy corporation. But do you know who invented the expansion chamber? Do you?"

"Why——"

"Perry Maclane did! He invented it and patented it. But Interplanetary wouldn't let a little thing like honor stand in their way. They copied the patent; they claimed one of their engineers had developed the chamber first; they fought the case through every court, and at last they fought Perry Maclane out of money, and won. It took four years to do it; and in the last year I was born and my mother died; and Perry Maclane was ruined.

"But he didn't give up. He worked

at anything he could find—he, the greatest rocket engineer in the world! He dug sewers and planned drainage systems; he did any sort of work, but meanwhile, all the time, he was carrying the idea of revenge.

"Evenings he worked on the plans of such a ship as no one had dreamed of, a rocket with inherent stability, one that could flash through gravitational fields as easily as through interplanetary space, instead of teetering down on its jets, wobbling and compensating and inching lower. And when he had it—I was three then—he found those who supplied money to build it.

"He wasn't the only man Interplanetary had ruined; others hated the corporation, too. So he built the *Red Peri*, and began raiding corporation ships. He had no trouble manning his ship; he could have had a thousand men; but he picked and chose among the best for his crew.

"At first he worked out of the Australian desert as a base, but that became dangerous. He thought of the Moon, and of an asteroid; but at last, because he had a ship to which planetary distances meant nothing, he came here to build his colony. Save for the years I spent at school, I've lived here ever since."

"But what of Red Perry Maclane?" asked Keene.

"He was killed three years ago. Do you remember when Interplanetary's Captain Thorsen of the *Lucrece* shot one of the pirates? That was my father; he died and was buried as he wanted to be—in space. It was I who killed Thorsen, with my own hand as he shot at me."

He stared at her. Those were certainly tears in the glorious, emerald eyes. "Peri," he said softly, "but what will be the end of it? Are you going on all your life pursuing revenge for your father? You're not really hurting Interplanetary, you know; they carry insur-

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ance. But you are slowing down the development of the planets. It's come to a point where people are actually afraid to travel."

"Good!" she flashed. "Then it's less trade and fewer fares to swell the coffers of Interplanetary."

"But—good heavens, Peri! With a design like that of your ship you could make millions legitimately!"

"Oh, of course!" she retorted sarcastically. "Just as my father did from the thermoid expansion chamber."

There was no answer to that. He shook his head sadly. "Then do you intend to live out your life as a pirate until you're finally captured, or until you die out here on this miserable black planet?"

"I DO NOT. I intend to carry out the plans of Red Perry MacLane. He wasn't fighting out of blind passion, you know. He built up his organization, here and on Earth, for a single purpose. Little by little, the plunder we take from Interplanetary goes back to Earth, to be turned into cash and securities, in banks in New York, London, Berlin, Paris, Tokyo. When I have enough—and a hundred million dollars will be enough—do you know what I'll do?"

"I don't, Peri." His eyes were glued to her tense, lovely face.

"Then listen!" she said fiercely. "I'll open a competing line to Interplanetary. I'll build ships like the *Red Peri*, and I'll drive the corporation to ruin! I'll have them groveling and begging, but this time I'll have money enough so they can't fight with crooked lawyers and bribed judges. I'll annihilate them!"

For a long time he stared at her strange loveliness, her wild, green eyes and flaming hair. "Oh, Peri!" he said at last, in tones of sadness. "Don't you see how insane such a plan is? Don't you know that once you produce the de-

sign of this ship, you'll be known as the pirate? No one else knows of it."

"I don't care!" she blazed. "The law can't touch anyone with a hundred million dollars. My father learned that from Interplanetary." And at his continued silence, she snapped, "Your advice would be to take it lying down, I suppose. I prefer to fight."

"But you don't have to declare war on the whole Earth on account of an injury done your father."

"War on the Earth? I haven't. But"—her green eyes glowed fiercely—"if I ever should, I could give them such a war as they never dreamed of!"

"What do you mean, Peri?"

"I'll tell you! Suppose I were to take one of those carbon feeders, like the ones that nipped your toe. Suppose I took just one tiny crystal and dropped it in the jungles of Africa or in Middle Europe or in the wheat belt of America. All life has carbon in it. What would happen to the pretty, green Earth, Frank? What would happen to the crooked lawyers and the bribed judges, and all the rest, honest and dishonest, right up to the heads of Interplanetary itself?"

"My Lord!" he said.

"Can't you see the crystal crawlers rustling their way along?" she cried. "Wheat fields, houses, horses, humans!"

"Listen!" he said huskily. "Do you know what I ought to do? I know what my duty is. It's to kill you, right now and here, while I've got you alone. Otherwise that mad and reckless spirit of yours may some day drive you to do just that. I ought to strangle you now, but—by heavens—I can't!"

All the passion drained suddenly from her face, leaving it alluringly wistful. "I'm glad you said those last two words, Frank," she murmured. "Look." She raised her arm; he saw her hand resting firmly on the butt of her revolver. "Would it please you," she asked softly,

"if I promised you never to think again of that particular revenge?"

"You know it would!"

"Then I promise. And now, tell me if you still blame me for being—the Red Peri. Do you?"

"I don't know. I think—perhaps—you are justified for feeling as you do, but, Peri, it's madness."

"What would you want me to do?"

"Why—the sane course, the honorable course, would be to make restitution, to return everything you've stolen; and then to give yourself up, to expiate the wrongs you've done, and so be free to live without the need of burying yourself out here at the edge of nothingness. I don't say you could do all of that, but at least you could return what you've taken and live as you were meant to live—honorably and happily."

"Honorably and happily!" she echoed bitterly. "Yes, except for the realization that I had failed my father."

"Your father was wrong, Peri."

SHE blazed in sudden anger. "Oh, you're too smug and self-righteous to live! I was going to offer you your freedom; I thought you'd understand and protect me, but now do you think I dare trust you to return to Earth? Now you'll stay as my prisoner!"

"Some day," he said evenly, "I'll drag you back to justice, Peri, and after you're free you'll thank me for it."

"Get out!" she cried. "You're stupid! I hate stupidity!"

He looked quietly at her angry, exquisite face, rose, and stalked out of the door. For a moment he stood irresolute in the corridor; then he strode toward the room he shared with Solomon Nestor, ignoring the glances of a number of residents as he went. And as he opened the door, the first person he saw was the girl Elza, in close conversation with the old man.

They looked up as he entered, and the

flaxen-haired girl drew away, staring at him with a curious expression in her blue eyes.

"Oh, bosh!" said the old man. "Elza, you're simply letting your imagination make you nervous. Listen, Frank—this girl came running here to tell me that you've been spending hours in the Red Peri's company, and that you were probably falling under her magic charms; and now Elza's afraid you're going to betray her to the Peri. Ridiculous, isn't it?"

"Utterly!" snapped Keene, wondering how much of it was ridiculous. He felt himself reddening, and repeated hastily, "Utterly ridiculous!"

"You see?" said old Nestor triumphantly. "All right, Elza, let's get on with this. You say you're sure you can't smuggle space suits to us?"

"I'm sure I can't. They're kept locked up by the Red Peri, and I can't get to them."

"But your father and brother wear them when they go to either ship, don't they?"

"Yes, but I wouldn't dare ask them. They'd tell the Peri. I know that."

"Well," said old Solomon thoughtfully, "if we can't get space suits, we'll have to do without. But you can get the key to one of the ships, can't you?"

"Not to the *Red Peri*," said Elza. "To your ship, perhaps, because my father has that while he's working on it. I could steal it away from him, I think. He just keeps it in a desk."

"What good would the *Limbo* do us?" grunted Keene. "They could run us down with the other. They could blast us to bits."

"They could, but they won't," retorted the old man. "You leave this to old Solomon. Now, Elza, when will your father have the jet repaired?"

"I think he's finishing it now."

"And could you smuggle the key to us to-night?"

"I think so. I'll try. To-night or to-morrow."

"Good!" said Solomon Nestor. "You run along now, Elza. You'll have your revenge on the Red Peri—if you're a good girl."

The yellow-haired girl vanished. Old Nestor turned quizzical eyes on Keene and said mockingly, "Ridiculous, eh! Utterly ridiculous!"

"What?"

"That you should be impressed by the Red Peri. How could so unattractive a being effect the redoubtable Frank Keene? Very ridiculous!"

"Oh, shut up!" growled Keene. "I admit she's beautiful, and I admit that what she told me has changed my opinion of her. All the same, I think she's arrogant and overbearing. I'm just as anxious as ever to see her take a fall, and if I can trip her, that's fine. But I don't see how the key to the *Limbo* helps."

"You will. Tell me what the Peri said to you."

KEENE recounted the story of "Red" Perry MacLane. Despite himself, he told it with a tinge of sympathy, and when, after concluding it, he described the events at the copper bridge, he was uncomfortably aware of old Nestor's steady gaze. He finished his tale and stared defiantly back.

"Well!" said the old man. "I suppose you realize that she risked her life for you—or at least the chance of having to cut off a finger or two. What if she'd touched the carbon feeders on your toe?"

"I—I hadn't thought of it."

"And now that you do think of it, are you still so bitterly determined to humble her?"

Keene considered. "Yes!" he snapped. "I am. I don't want to hurt her, but I do want to get back at her for the way she's insulted, browbeaten,

and mocked me. I want to see her take a fall."

"Even though it means capture for her?"

Keene groaned. "Listen, Solomon. Right now I'm so puzzled that I'm not sure. But I do know that I want to see the Red Peri paid back for the way she's acted toward me."

"All right. I think you're in love with her, Frank, though it's none of my business."

"Damn right it isn't!"

"But," proceeded Nestor, "just how badly do you want to do this?"

"With all my heart!"

"Would you risk your life and hers to do it?"

"My life," said Keene grimly, "but not hers."

"Good enough. Now, the first thing to do is talk you out of a few superstitions."

"I haven't any."

"You have, but you don't know it. Listen, now." The old man bent closer and began to talk in a low, earnest voice. At his first words Keene paled and started; then he sat very still and very intent. After five minutes of listening, he drew a deep breath, expanding his mighty chest to the full.

"I used to plunge at the university," he said exultantly. "I could hold my breath for four minutes. I can still do three and a half!"

"That's plenty," said Nestor.

"Yes, if it works. If it works!"

"If I were you," said the old man, "I'd find out—now!"

For a full minute Keene stared at him. Suddenly he nodded, turned swiftly away, and darted out into the corridor. In five minutes he was back again, but sadly changed, for his lips were swollen, his eyes red, and his breath a rasping gurgle. But he was smiling.

"It works!" he gasped triumphantly. "It's unadulterated hell—but it works!"

V.

ELZA did not appear that night, although Keene tossed and twisted wakefully for miserable hours. In the darkness the thing he had to do appeared grotesque, fantastic, impossible; and this despite the fact that he had already tested the truth of old Solomon Nestor's reasoning. His toe ached and his lips and eyes burned, but more painful than all else was the idea of inflicting harm on the courageous and proud Red Peri.

When, well toward the end of the ten-hour Plutonian night, he finally fell into troubled slumber, it was but for a brief while, and he rose sullen and morose to pace the floor of the chamber.

The fluorolux light awakened old Nestor. For a few moments he watched the pacing Keene, and then asked, "Did Elza come?"

"No, and I hope she doesn't," snarled Keene. "I hope she couldn't get the key—and if she does get it, I'm not going through with this!"

"It's your business," said Nestor indifferently. "It doesn't mean anything to me, because I'd never live through it, not at my age. I have to stay here anyway, and I don't mind, because Elza said they'd moved my instruments into the cave; and I can work here almost as well as farther out in space. But if you love the girl so intently, why don't you act like a human being and tell her so?"

"Love her!" yelled Keene. "Just because I feel like a dirty dog at the thought of this, doesn't mean I love her! She's a girl, isn't she?"

"And a very beautiful one."

"Bah! She's a girl, and I hate to fight women!"

"Well, don't then," suggested old Solomon.

"Yet I want like the very devil to get back at her."

"Then do."

"And yet, in a way I can't blame her."

"Then don't."

Keene resumed his pacing. In another minute he stopped, faced the old man, and said defiantly, "Solomon, I can't do it. I know she's a pirate and a menace to trade and civilization, but I can't do it."

Before the other could reply, a knock sounded on the door. Keene whirled. "I hope," he muttered, "that it's breakfast—just breakfast."

It was. Elza brought it in silently, placed it on the table, and retired; and Keene felt a vast surge of relief. She hadn't managed to get the key! He was almost ready to sing until he picked up his cup of coffee and there it was—the familiar key to the outer door of the *Limbo's* air lock.

He met old Nestor's amused, blue eyes with a cold glare, and it was hardly softened by the other's murmur of "After all, Frank, you don't have to use it."

"I know I don't!" he snarled. "I have a fine choice, haven't I? I can stay here the rest of my life, if our hostess doesn't take a notion to kill me, or I can escape by following your scatterbrained plan of doing a thing I hate. I can't escape alone, for they'd simply run me down with their pirate ship."

"Or you could turn pirate," suggested Solomon Nestor.

"Gr-r-r!" said Keene amiably.

He was unaccustomed to this sort of agonized indecision. He had never encountered a situation that pulled so many ways at once; for in all his experience right had been right and wrong had been wrong—yet now he was not at all sure but that the laws of relativity operated in the moral field as in the physical. Certainly the Red Peri was not entirely in the wrong, yet equally certainly she was a pirate, a menace to progress, an antisocial being, and there-

fore a criminal. If she would only give up this mad purpose of hers; if she would make restitution; if she—— He swore bitterly and strode out of the door, scarcely realizing that the *Limbo's* key was in his pocket.

He turned at random toward the outer arch of the cave. Figures in space suits were passing in and out through the electrostatic seal, and he noticed that the outgoing men were laden with cases, boxes, cans, and bundles. He stood at the very edge of the seal and stared out into the dim, nightlike morning of the black planet. Beside him a row of metal-clad figures clanked outward, their footsteps dropping to sudden silence the instant they trod into the airless outdoors. He watched them carry their burdens to the *Red Peri*, where an air lock swung open to admit them. They were lading the ship.

KEENE stared disinterestedly, without comprehension. Then, abruptly, the meaning dawned on him. He stiffened, peered closely through narrowed eyes, and spun to accost a metal-sheathed figure that approached, Marco Grandi, for he could see the dark, aquiline features behind the visor.

"What's this?" Keene snapped. "You're carguing the *Peri*. For what?"

Grandi made no answer, and Keene planted himself squarely in the other's way. "For what?" he blazed.

The metallic voice of the diaphragm clicked. "Stand aside. We're busy."

"I'll keep you busy!" he roared. "I'll——"

"You'll what?" queried the cool tones of the *Peri*.

Keene whirled. The girl stood at his side, clad in an all-enveloping, clinging robe of bright green that echoed the infinitely more brilliant emerald of her eyes.

"They're stocking the *Red Peri*!" he shouted.

"I know it."

"Why? For what purpose?"

"For purposes of business."

"Business! You mean for purposes of piracy!"

"Piracy," she said coldly, "is my business."

"It was your business, you mean!" With a great effort he controlled himself and faced the mocking green eyes. "Peri," he said more calmly, "I want to talk to you."

"It isn't mutual."

"I want to talk to you," he repeated stubbornly, "alone." He glanced at the hostile eyes of Marco Grandi.

The *Peri* shrugged. "Go on out, Marco," she ordered, and then to Keene, "Well? What is it?"

"Listen," he said. "I want you to quit this business. I want you to be fair to yourself. You're capable of infinitely greater things than piracy."

"I know it. When I'm ready, I'll achieve those greater things."

"Oh, revenge!" he snapped. "Suppose you succeed. Do you think you'll be any happier?"

"And if I'm not," she countered, "what is it to you?"

He drew a deep breath. "It's a lot to me," he said soberly, "because you see, *Peri*, I happen to love you."

Her green eyes did not change. "What you call love," she said contemptuously, "isn't my conception. If you loved me you'd take me exactly as I am."

"I was brought up to believe in honesty, *Peri*."

"And I," she retorted, "was brought up to believe in honor. Red Perry Mac-lane's honor needs avenging, and there's none but his daughter to see to it."

Keene pounded his fist impatiently against the wall. "Peri," he said at last, "do you love me?"

She made no immediate reply. From

somewhere in her heavy silken gown she produced a cigarette, lighted it, and blew a gray plume of smoke toward the seal. "No," she said.

"Why did you risk your life for me back there at the pit? What if you had touched the carbon feeders?"

She glanced out into the cold, black valley. "I may have thought I loved you then," she murmured, eyes still averted. "That was before I knew how little you could understand my feelings. We're just—not the same sort."

"I think we are," said Keene. "We've simply learned different moral codes, but—Peri—my code's the right one. Even you can see that."

"It's not for me. What my father wanted is the thing I want and the thing I'm going to do."

He groaned and abandoned that line of attack. "What do you expect to do with Solomon Nestor and me?"

She made a helpless little gesture. "What can I do? I have to leave you here." She turned her green eyes back to him. "Frank, if you'd promise to keep this place and my identity a secret, I think I'd be willing to release you."

"I can't promise that."

Her voice hardened. "Then here you stay."

"So you've given up the idea of killing us?"

"Oh," she said indifferently, "I'm always indulgent to those who claim to be in love with me."

Her attitude angered him. "You're pretty confident, aren't you? If you leave us here while you're off pirating, you know damn well we'll be doing our best to overcome you."

"And I know damn well that you'll never outwit me," she retorted.

Keene's hand suddenly encountered the *Limbo's* key in his pocket. "I won't, eh?" he muttered. "See here, Peri. Are you determined once and for all to stick to this scheme of yours?"

"Once and for all, I am."

"And it makes no difference that I tell you I love you?"

She turned abruptly and faced the grim outdoors, staring over the dead, cold, black Plutonian landscape. "It makes no difference, Frank."

"And nothing I can say will make a difference?"

She gestured impatiently, still staring far away. "Oh, what's the use of arguing? No, Frank."

He looked silently at her, seeing her, seeing her glorious hair flaming against the cold background of black mountains. He peered thoughtfully down the deserted corridor, and then at the *Red Peri*. The valley was lifeless; the men were within the vessel and the air lock was closed. Dim across the plain was the dull bulk of the *Limbo*, whose key was clutched in his hand.

"Well," he muttered sadly, "you've asked for it, Peri."

She did not turn. "For what, Frank?"

"For this!" he cried, and with a sudden lunge he sent her and himself staggering, unarmored, into the airless Plutonian plain, and into a temperature of ten degrees above absolute zero!

VI.

INSTANTLY he was in hell. The breath rushed out of his lungs in a faint expansion mist that dissipated at once, the blood pounded in his aching ear drums, his eyes seemed to bulge, and a thin stream of blood squirted darkly from his nose. His whole body felt terribly, painfully bloated as he passed from a pressure of twelve pounds per square inch to one of nearly zero. He fought his agony grimly; he had to hold consciousness as long as he could. But old Nestor had been right; he was living.

He had a momentary impression of

the Peri's green gown billowing up from her glorious body like a balloon, to settle back instantly as the bound air escaped. Then she whirled, eyes wide, mouth open and straining for air that simply was not there, hands clutching frantically at her gasping throat. She was in full command of her own agile mind, and she sprang convulsively for the archway and the seal. Grimly he thrust her back.

She was trying to scream. Her breast rose and fell in futile, soundless, panting gasps; moisture formed on her forehead and vanished instantly. Swift as a deer she darted again for the archway; and again he controlled his agony to smash her back.

For once in her life the Peri knew sheer panic. No longer had she the co-ordination of mind and muscle that might yet have encompassed escape. Fierce pain and utter fright had robbed her of it; and for a few seconds she could only thrust aimlessly against Keene's braced body, her hands fluttering frantically, her legs pushing convulsively, her lovely, pain-racked, wild, green eyes but inches from his own.

He had a double task now; he had to hold her back from the entrance and at the same time keep any part of her twisting body save her shod feet from contact with the searing cold of the rocky ground. He clutched her violently against him. Suddenly her struggles grew weaker, her hands went vainly to her tortured throat, her hands closed, and she collapsed.

They were almost at the air lock of the *Red Peri*. He saw it fly open, he glimpsed Marco Grandi's appalled face behind his visor, but he had no fraction of a second to lose. He swung the Peri across his shoulder and set off on a staggering run for the *Limbo*, more than nine hundred feet away across a vacuum and a cold only less than those of space

itself. Grandi could never catch him; no one could run in a space suit.

The Peri was not light; on Earth she might have weighed a hundred and fifteen pounds, but here it was more like a hundred and forty. His own weight was greater too, but he felt none of that; the excruciating torment that racked his body erased all lesser tortures.

He crashed unseeing through a parade of aluminium feeders, and blood spurted wildly from a tiny scratch on his ankle, and then—then he was fumbling at the *Limbo's* lock.

The door flew open from its inner pressure; he bundled himself and the Peri within, pulled it to, and collapsed as the hissing of the automatic valve sent a heavenly stream of air against his face. He had crossed a thousand feet of vacuum and still lived!

The air pressure reached normal. He fought to his knees, opened the inner door, and dragged the girl through it. She lay with her magnificent hair streaming on the steel floor; blood trickled from her nose—but she breathed.

Keene had work to do. He thrust wide the feed to the underjets, and the ship roared, rising shakily as he peered through the floor port at Marco Grandi plodding desperately across the plain. He let the *Limbo* rise aimlessly; later he could set a course.

HE DRAGGED the limp Peri to a chair. About her slim waist he twisted the iron chain from the aft ventilator, and locked it with the padlock of Nestor's empty bolometer case. The other end he locked carefully to a hand hold on the wall, and only then, laboring and gasping, did he turn his attention to the medicine kit.

He poured a half tumbler of whisky and forced a good portion of it between the Peri's lips. Still pain-tortured, it was yet agony to him to see the lines of

anguish on her unconscious face, and to hear the choking of her breath. She coughed weakly from the liquor, and moved convulsively as he sprang back to the controls and set the *Limbo* nosing Sunward. That was close enough for the present; later he could lay a course for Titan.

The Peri stirred. Her uncomprehending green eyes looked vaguely toward him, and then about the chamber. She spoke. "Frank! Frank! Where am I?"

"On the *Limbo*."

"On the——" She glanced down; her hand had encountered the chain about her waist. "Oh!" she murmured, and stared at it a full half minute. When she looked up again her eyes were quite clear and conscious. "You—you've got me, Frank, haven't you?"

"Right where I want you," he said grimly. Strangely, there was no satisfaction in it. He had wanted to see her humbled, but now it was pure pain.

"Why—aren't we dead, Frank?" she asked slowly. "We were—in the airless valley, weren't we? How is it that we still live?"

"I'll tell you, Peri. It was old Solomon's idea. Everybody's been believing a lot of superstitions about space, but he figured out the truth. It isn't the vacuum that's dangerous, and it isn't the cold; it's the lack of air. We couldn't freeze, because a vacuum is the best heat insulator there is; we aren't like that aluminium spade of yours, because our bodies actually produced heat faster than we radiate it away. In fact, it really felt warm to me—as far as I could be conscious of any feeling in that hell.

"And as for all the gruesome stories of lungs collapsing and all that, every high school physics student sees the experiment of the mouse under the bell jar. An air pump exhausts the jar to

the highest vacuum it can attain, the mouse loses consciousness—just as you did, Peri—but when the air returns, it recovers.

"Its lungs don't collapse because there's no outer pressure to crush them, and its body doesn't burst because the tissues are strong enough to maintain that much internal pressure. And if a mouse can stand it, why not a human being? And I knew I could stand lack of air longer than you."

"It seems you could," she admitted ruefully. "But still, Frank, that terrible drop in pressure! I see that we didn't explode from it, though it felt as though we should; but I still don't see why."

"I tell you because our tissues are too tough. Look here, Peri. The pressure at sea level on Earth is 14.7 pounds per square inch. The pressure on top of Mount Everest is four pounds per square inch. That's about six miles above sea level.

"A hundred and fifty years ago, way back in 1930, open airplanes flew over Mount Everest. The pilots didn't suffer much from lack of pressure; just as long as they had oxygen to breathe, they could live. Yet from sea level to 29,000 feet altitude is a drop of eleven pounds per square inch—almost exactly the drop from the pressure in your cave to the pressure outside."

"The human body can stand that much of a drop; all it really does is cause altitude sickness. As a matter of fact, a pearl diver going down in four or five fathoms of water meets a greater variation than that. Plenty of South Sea skin divers work in that depth, utterly unprotected. What might have happened to us is the bends, but your own air system thoughtfully prevented that danger."

"M-my own air system?"

"YES, PERI. The bends are the result of decreasing pressure, which ordi-

narly causes the blood to give up its dissolved nitrogen as bubbles. It's the bubbles that cause the disease. But your air doesn't contain nitrogen; it's made of oxygen and neon, and neon doesn't dissolve! So—no dissolved gases, no bubbles and no bends."

"But—it's fantastic! It's impossible!"

"We did it. What do you think of that?"

"Why"—her voice was meek—"I think you're very courageous, Frank. You're the only man ever to see the Red Peri frightened, and you've seen that—twice."

"Twice? When was the other time?"

"When—when I saw the carbon feeders on your foot."

"Peri!" he groaned. "This whole thing has hurt me enough, but now if you mean——"

"Of course I mean it," she said, looking steadily at him. "I love you, Frank."

"If I dared believe you, Peri—you know I love you, don't you?"

A faint trace of her old mockery glistened green in her eyes. "Oh, of course," she said. "I could tell it because you've been so kind to me."

Her sarcasm tortured him. "I had to do it. I have to bring you over to my side of the fence, Peri—the honest side."

"And you think you can?"

"I can try."

"Really?" she taunted. "Frank, don't you know my ship will be alongside in a matter of minutes? You can't outrun the Red Peri in this tub. You have me helpless now, but I won't be so for long."

"Indeed? Well, tub or not, the *Limbo's* solid. They don't dare blast the ship with you aboard, and if they try to tie up and cut their way in"—he turned narrowed eyes on her—"I'll ram

the Peri! As I said, this ship is solid, far more solid than your triangular speedster. I'll smash it!"

The faint color that had returned to the Peri's face drained out of it. After a moment she said in very low tones, "What are you going to do with me, Frank?"

"Peri, I'm going to take you back to trial. After you've expiated your crimes—and with your beauty in an American court the sentence will be light—I'm going to marry you."

"Marry? Yes, I'd marry you, Frank, but don't you realize piracy is tried under maritime law? The penalty is—death!"

"Not for such a woman as you. Three years—no more."

"But I'm wanted in every country on Earth, Frank. They'll extradite me. What if I'm tried for murder in an English court?"

"Murder?" he echoed blankly. "I—I hadn't thought of that. My Lord, Peri! What can we do?"

"What we do is in your hands," she said dully. He saw tears in her green eyes.

"I—don't know. I swore a solemn oath to uphold the law, I—can't break an oath. Peri," he cried fiercely, "I have money. I'll fight through every court in the country to prevent your extradition. You'll return all you've taken. They'll be lenient; they have to be!"

"Perhaps," she said tonelessly. "Well, I don't care. You've won, Frank. I love you for it."

Impulsively he dropped the controls, strode over to the chained girl, and kissed her. He had to make it brief, for his own eyes were suddenly misty. At the controls again, he swore bitterly to himself, for he realized now that he could never risk bringing the Red Peri to trial. He thought somberly of his broken oath; that meant nothing if keeping it endangered the girl he loved.

HE FORMED A PLAN. At Nivia on Titan there'd be an inspection of the ship. He'd hide the Peri—in a cool jet, perhaps—and tell his story without mention of her capture. He'd disclose the location of the pirate base and let the government rockets rescue old Solomon and destroy the colony. And then he—

Then? Well, he'd land the *Limbo* in Iraq. He had friends there who'd keep the Peri safe. He'd fly home and resign his damned official position, and so be free to marry pirate or murderess or any one he chose—and no one would ever know that the lovely Mrs. Keene had once been the dreaded Red Peri.

For the present he'd let the girl believe he was taking her back to punishment; at least that might frighten her into a respectable life. He smiled, and looked up to find the luminous green eyes fixed steadily and unhappily on his face.

Before he could speak the buzzer of the static field sounded the signal that warned of meteors. But meteors were rare indeed out here beyond the orbit of Jupiter. He stared back at the vast black disk of Pluto, and true enough, there was a little flare of light against the blackness that could mean only a rocket blast. Second by second the flame approached, and the *Red Peri* rushed toward him as if his own blast were silent.

The pirate ship paralleled his course. Suddenly the annunciator above him spoke; they had trained an inductive beam on it. "Cut your jets!" came the words in a cold metallic voice that was still recognizable as Marco Grandi's.

He had no means of reply, so he bored grimly on. The *Red Peri* slipped close beside him. "Cut your jets," came the order, "or we'll blast you!"

Keene thought suddenly of the communication system from the pilot room to the stern. If he spoke into that, and

if their tubes were sensitive enough, it was possible that their receiver might pick up the induced current. He switched it on full.

"*Red Peri!*" he called. "Can you hear me? Can you hear me?"

Reply was immediate. "We hear you. Cut your jets!"

"I won't," said Keene. "If you come a single yard closer I'll ram you. The Peri's aboard, and if you blast this ship you'll kill her as well as me."

There was a silence. "How do we know she's alive?" asked Grandi's voice.

"Watch the forward port," said Keene. He unlocked the chain at the hand hold. The girl made no resistance as he led her to the port, following as meekly as a puppy on a leash.

"I'll have to make this look serious," he said. "I'm sorry, Peri." He twisted his hand roughly in her glorious hair and thrust her close against the port. After a moment he released her, led her back to her chair, and relocked the chain.

"*Red Peri,*" he called, "move away or I'll ram you. Keep a quarter mile distance."

There was no reply, but the pirate ship slanted silently away. Like a child's model it hung in the void, tenaciously paralleling his course. But he knew it was helpless; Grandi dared not risk the Peri's safety.

Nearly an hour passed before the Peri spoke. "I don't understand you, Frank," she said miserably. "When your life was in danger I risked mine to save you, but you risk your life to destroy me. Is that what you mean by love?"

"I risked mine, not to destroy you, but to save you," he muttered. "Peri, I couldn't bear the thought of your living such a life as you have been living. I want you to be happy."

"Happy," she echoed mournfully. "If

this is your idea of happiness——” She left the sentence unfinished.

HOOR AFTER HOOR the pirate clung grimly beside them. After a long time Keene slept, trusting to the buzzer to rouse him if Grandi should attempt to cut through. The last thing he saw was the luminescent eyes of the Peri, and they were the first thing he saw on awakening. She sat as if she had not moved.

Another day passed. Pluto was a pallid, tiny disk far behind them, Neptune and Uranus were beyond the Sun; but Saturn gleamed brightly. All day the Peri was mournfully silent, and when he kissed her before sleeping, she clung to him almost as if in panic. He remembered that later, for when he awoke she was—gone.

Gone! The chain was missing, and only a square of paper—a star chart—lay on her chair. She wasn't on the *Limbo*, and the *Red Peri* no longer hung silent on the left. He seized the note in a frantic clutch. He read.

Frank—dearest Frank—this is farewell. I love you; and the proof of it is that I could have escaped before this while you slept; but I wanted to stay. I was all but willing to suffer before the law if it meant having you—but I can't. Not even three years, because I'd die without freedom.

I had an iron feeder in my pocket, for I always carry them on raids, as you remember from the *Aardkin*. It's eating the chain now, but it won't attack chrome steel; your floors and walls are safe.

Frank, if you had weakened, if you had promised me safety, I think I should have stayed, but—perhaps—then I should have loved you less than I do now.

Good-by.

The note was unsigned. She had taken a red chart pencil and drawn a creditable picture of a tiny, winged elf—a red peri.

Keene knew what she had done. There were no space suits on the *Limbo*, for he and Solomon had worn them to the pirate cave. She had signaled her ship, opened the air lock, and brayed once more the vacuum of space to fling herself across.

When he had finally exhausted his vocabulary of expletives and biases, when he had at last called himself all the varieties of fool he knew, Keene realized what he had to do. He couldn't find her on Pluto, since the Peri would certainly move her base elsewhere for fear he'd direct a government rocket there. But what he could do, what he had to do, was to get a job on an Interplanetary freighter, and then wait. Sooner or later—sooner or later, he repeated grimly—he'd meet the Red Peri again.

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PROBAK JUNIOR

Fruit of the MOON-WEED

*He was tired of being penned up in
the space ship!*

by J. Harvey Haggard

WOW!" exclaimed Bru Wycoll, as the blue-javelined object cut through the violet atmosphere, narrowly missing his head, and stuck quivering in the protruding patch of rocky soil beyond—soil that was tinted purple by the strange illumination. "That's what I call asexual reproduction!"

"Skip it, you spiral head!" I snorted angrily. "I told you we ought to have got back to the space ship. Confound it, maybe this'll teach you something. Those javelin trees are shooting off their sprays, and every spore is sheathed in a streamlined, horny glider. If one of those fish-hooked seed thorns catches in human flesh—too bad! Look out!"

Bru's face, usually impetuous and eager, turned white, then green and yellow in the shifting illumination. He stood knee-deep in a lush creeper grass. Beyond him the forest of javelin trees, huge twenty-foot shapes like monstrous pineapples, with yard-long spore bristles spiking off to give an outlined resemblance of the back of an enraged porcupine, were changing colors too. Their season for flinging off the dart-shaped spores, from which they took their name, had arrived.

With a clicking impact, another javelin spore was flung across the thick, currentless atmosphere, with a speed that would have impaled our bodies on

cruel barbs, after the manner of pins sticking through specimen flies—but it went far from us. It traveled with a sinister whirring sound as the barbs ground in and hooked into the wood of a neighboring jungle giant.

There was no wind current on this little planetary body, which was really a satellite of a dead star. Therefore nature had taken this peculiar means of perpetuating reproduction of her plant creations, adapting their growth to the unusual circumstances. The javelin spores could be hurled through the still air for as far as two or three hundred yards, impelled by the dried husk which contracted suddenly, loosening the spore seeds and imparting propulsion energy to the severed dart.

"Gosh, ladies' man!" ejaculated Bru, and his teeth were chattering; yet it was plain that the man sensed his fault, but stubbornly resented my crude accusation. "I didn't intend to get you in a spot when I asked you along——"

"Watch out!" I shouted, and kicked him roughly into the creeper grass, as another javelin spore zizzed past the spot he had just vacated. "If you stand in the way I can't be responsible. We should have stayed with Krapelli, watching the moon-weeds. I can't save your life every time, you know."

He knew I'd saved his life then, kicking him from the path of the oncoming



Through the pit, a monstrous, black demon was stalking, yellow glazed eyes set upon us.

missile, but it made him angry. Bru Wycoll had often boasted tacitly that he could take care of himself. This didn't look like it. He scrambled to his feet, reaching for the hilt of his dissembler blast gun, swinging in a holster at his hip.

"Damn you, Murston!" he cried savagely. "You may be a ladies' man on the planets, but they ain't none here, and by Heaven, I ain't a female to be

kicked around!" As an additional sign that he was furious he had reverted to slang.

"Don't be a fool!" I retorted angrily, stifling the impulse to leap for his throat in answer to his challenge. We had been crossing each other for days. "Look around once—then run like the devil was after you. Krapelli's lucky—watching for the moon-weeds to bloom!"

He still ignored the surrounding

danger. Javelin spores began to click, sounding like corn starting to pop after lying in the hot sun. "You've been pussy-footing around about that legend of the moon-weed," he accused, "ever since we came for the fruit. That fool myth says the fruit of the moon-weed is born of the soul of a dying man! Don't be a sap."

"Shut up! It's not the moon-weeds I'm worrying about. It's these other plants—the javelin trees—and if you want to wait to be impaled on the poisonous barbs of one of them, good-by."

TURNING, I left him fuming, and ran as rapidly as possible in the direction of the space ship. He was not long to follow. Yes, he was right; I had been apprehensive, ever since we came to this odd little moon of a dead star—a dead star which formed one of a cluster of six.

We were running now, stumbling over the creeper weeds, avoiding the bulking javelin trees, whose spores were shooting out like random arrows, grasping at the dissembler blast guns in our swinging holsters. Maybe we could blast a spore dart out of the air, if it came straight and we couldn't dodge. If one impaled our bodies, or as much as pricked the skin with its deadly poison; well, we could turn the blast weapons on ourselves before the deadly putrefaction crept along our blood veins, rotting away streamers of living flesh. Bru was up with me now. His spade-shaped face shifted from a yellowish color to a dark blue, with greenish hair falling awry over his forehead. His body was brown.

It's hard to realize something so alien to Earth, conveyed by mere word pictures; hard to comprehend because you've got to compare it with objects and sights on the terrestrial globe. That makes descriptive words limited. Inadequate words are merely similarities, and not detailed conveyance of thought. When you try to imagine shades and

hues you've never seen, the imagination stops blank. Few of those tints and shadows were similar to the common ones we see on Earth.

We were running like startled deer, bouncing across a ragged marble turf which was changing colors as though the solid ground were shifting beneath us, our hearts pumping like pistons. Yes, I was frightened. I hadn't wanted to come this far from our space ship, which was landed in the valley of the moon-weeds, awaiting the plant fruition that we might carry the priceless seeds back to civilization.

Krapelli, the third member of our astral expedition to this barbarous satellite, was taking his shift at watching the moon-weeds, waiting for the large twelve-inch buds to open into flowers. Bru Wycoll had wanted a little jaunt by way of diversion. He was tired of being penned up in the space ship, of breathing synthetic air, of pacing the tiny decks, each inch of which he knew so well. The extraordinary little moon body excited his adventurous blood. Our gravity here was little less than on Earth, for Nircon, the moon, was of greater density.

Sweat poured from my discolored brow. The atmosphere moved in sluggish currents stirred by our bodies, as if resentful of being moved after eons of extremely lethargic characteristics. The atmosphere was tepid and smelled of cloves.

Overhead, as we ran, were three bright stars, forming the illumination radiating down from the violet heavens. One star was red, one was green, and one blue, combining their light rays often to form the customary white of intermingled colors; however, the fluctuations of the triad of stars as regards to prismic coloring were so irregular that often parts of the familiar colors were absent, which gave temporary hues of every rainbow shade to the illumination cast on the satellite.

Obviously, the inner combustions of the three blazing stars were changing continuously, as would have been revealed by spectroscopic lines, emanating from the exploding gases. The result, as witnessed on the moon, Nircon, was a marble effect of shifting shades, gyrating crazily about the horizon, tinting the objects with new puzzling colors with each passing moment. As Wycoll had remarked carelessly on our first landing, "it looked as pretty as a Fraunhofer Line color graph!"

Vivid-red swaths came after yellow streaks, to be chased over the horizon by white splotches, with green and blue stripes running irregularly, sometimes in opposite directions, along the ground, like color-tinged cloud shadows before an intangible wind.

Since the color of an object depends on the wave length reflected, the soil, together with the vegetative growths, as well as our own bodies, were constantly undergoing chromatic changes. For instance, if an object, such as the javelin tree, fairly bristling with long, needle-sharp spines, reflected but two colors—green and orange—the shading of the plant would be black in the temporary absence of these colors from the luminosity spectrum.

Their intermittent appearance would tint the plant either one color in the absence of the other, or blend the hues in varying intensity as both colors appeared simultaneously. Since the surroundings were made up of an intricate pattern of objects, of differing qualities as regards to color absorption and reflection, the shifting of colors from the three flickering stars caused an incessant but brilliant "aurora borealis" metamorphosis of colors.

THE WAY was rough going. We scrambled over the boulder-strewn expanse, shifting with lambent colors. Once Bru stumbled on a round rock and came near falling. I slanted close in

my stride to hold him up, but he gave me a vindictive look and ran on up the slope. Maybe I had been too severe with Bru, in speaking so frankly of his foolhardy insistence on exploration.

We had always been pretty good friends before and many were the planets we had crossed as companions, but his indefatigable curiosity had been riding my nerves for some time. Just now, I had an idea we were through with each other. He was infuriated to think he owed his life to me.

Now a knife-edged cliff loomed, crowned with a small green-splotched range. We slid down through a rocky crevice, a V-cleft between seemingly impassable forests of the javelin trees, and our path began to descend toward a canyon rift that would lead presently to the moored space ship. Overhead, the violet skies were splintered through with the flying spore darts, which were being ejected profusely now.

I cut my hand on a sharp rock, hooking it back into a hole for a finger hold on a sudden precipitous descent. We weren't afraid of snakes. There weren't any snakes on Nircon—nor any other animal life.

On our own Earth, the plant and animal life formed a balance. Animal life absorbed oxygen from the air and gave off carbon dioxide; the plant life absorbed carbon dioxide and restored oxygen to the air. It was a perfect cycle. Here it wasn't so. The carbon dioxide given in to the plants seeped from fissures in the broken surface of Nircon.

Animal life had never developed. There were no birds, no insects. Any one versed in the perpetuation of plant life would realize instinctively that the absence of insects, which are so consistently associated with cross pollination of plant life, would make a tremendous difference in the plant evolution of Nircon. And it had. Here the plants we had observed either divided

by fission, or cell division, as in the smaller plant life, or by zoöspores such as the javelin trees utilized—throwing of asexual spores.

It was a much despised and dreaded world, this little moon of a dead star, illuminated on all sides by five live stars of the cluster—two of which were at the time hidden by the horizon. There were no dark periods and light periods, no night and day. The light was consistently bright, or consistently spasmodic as one might say, over the entire circumference.

There were no heated spots to stir up wind by convection. No oceans existed on Nircon; consequently, there were no tidal effects to stir up barometric pressure. The stiffest breezes on Nircon were but gentle zephyrs to the Earth-born men. It was a silent world, colored by intangible shades which sped at erratic speeds. There was something maddening in the fleet bizarre hues of the everchanging light.

Bru had laughed when the black, horn-faced natives who overran Tartarin, the dead star about which Nircon circled, had made superstitious signs and ran to cover their elongated faces when it was learned that the three terrestrial adventurers sought the fabled Nirconian moon-weed, whose very inaccessibility had made the mythical plant a thing of value.

No one had ever possessed a Nirconian moon-weed. Only one of the three terrestrials had ever seen the fruit of the moon-weed and that was Krapelli, who had once nibbled at a seed. Krapelli was a stout, heavy-jowled man, who was always preoccupied with his own thoughts; it was not the thought of accumulated wealth that brought him irresistibly to Nircon. It was some impelling urge he could not have explained.

The clove-scented air was thick in my laboring lungs. My feet ached with the exertion derived from leaping along the

rugged canyon floor, dodging boulders, going around the spores of the javelin trees which stuck up in the ground like set pikes, some of them waist high. The odd coloring made the scene unreal in its vividness.

I DON'T KNOW what premonition caused me to pause, just before breasting the rise which would give a view into the amphitheater that held our space ship in its natural hollow, with the patch of Nirconian moon-weeds growing in one side of the gigantic cup-shaped depression.

A mountain range loomed craggily here. Jagged crevices licked up toward the commingled haze beneath the three glimmering stars. Sharp points jumped skyward, were limned with darker shadows, accentuated with occasional javelin trees. But for some reason, I sensed something unusual in the air. Perhaps I instinctively felt an intimation of danger.

I stumbled to the rise. But Bru breasted it before me. He cursed, his eyes widening. Below us lay the small rocky valley. There lay our space ship, an ovoid pearl-colored vehicle now, shimmering iridescently under the heavenly play of light. Across from it, at the farther end of the valley, was the patch of moon-weeds, each of which was no higher than a man.

A change had taken place. Great gaping corollas spread out from the foliage. What natural colors suffused those flowers I know not, for the demoniacal rhythm of shades was flashing across, disguising them with unnatural lighting. The corollas were almost indiscernible against the glaring hues of the vegetative undergrowth. I noticed one of the moon-weeds especially, where a single, dried, withered flower hung, half torn from the stalk; in its stead a swelling fruit pod, larger than a man's fist, was forming.

"Look!" shouted Bru delightedly. "It

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is their season, too. One of the moon-weeds has a fruit!"

I stared, but not at the fruit. It was a crumpled patch in the field of crazy color that captured my attention, a sagging sack of flesh, lying before the discular outer valve of the space ship. Though the man had slumped down there, his hands stretched rigidly toward the interior of the ship, as if he had fallen in attempting to gain the security of its belleranium walls.

"That's Krapelli!" I shouted in consternation, and leaped down the slope. "Krapelli! It's he, all right!" My mind was a chaos; all I could think of was that the old wives' tale had come true. A fruit of the moon-weed had appeared; a man had died.

He was sprawled on his back, his features swollen and mottled in death by gruesome colors that seethed incessantly. They seemed angry, those dancing colors. The hands of the man were outstretched, clenched rigidly. His mouth lolled open, thick with syrupy saliva.

I can see the scene now. It was branded on my memory—that natural amphitheater, cupped in by the cutting jag-notched edges of shelving precipices. The ovoid space ship, with its round valve ports easily discernible, as was the bulging conning cowl, headed by its masking sheath of transparent glassite.

Beyond the glassite were the control mechanisms and the antigravon sheathings, which controlled exterior gravity and flung the ship through interstellar space. How well I recall the horror of it: the man, lying there in hideous contortion; Bru, in his metal-mesh togs, his leathern boots, his face, despite the hanging coloring, expressing a chilled, inner fear through the eyes; and the moon-weed—

Especially do I remember the moon-weed; I can recall the thick convolutions of each lower leaf, of the delicate new-formed fruit, of other monstrous corollas, uplifted like hoods. And over all,

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those ephemeral colors were chasing with maddening inconstancy, creeping into each corner and niche, finding every depression. I think it was that which made everything so ghastly.

"Something killed Krapelli!" I snarled viciously. "Something did kill him. There's other life, other animal life, here, somewhere."

Bru was leering, his spade-shaped features hanging like an unhealthy mask. Yet the lip quivered; I knew he was afraid, horribly afraid, as I was.

"You know that's a lie!" he retorted in a cold, strained voice. "You know there's no animal life, not a bird or even a damned fly, here!"

I wasn't looking at him. My scrutiny swept the crumbling ledgeways leading across to the moon-weeds. Somehow those hooded flowers were sinister now. I could see the slender stamens shooting out from either side, like multitudinous tongues laden with light-colored pollen, and the central button-shaped pistil protruding up from the center.

A heady smell permeated the still air. It cut my nostrils at first with its acrid scent, but it was not unpleasant. I disregarded it. I was kneeling by Krapelli, for we had made sure that he was quite dead. I wasn't seeing him. My eyes had caught a flutter of motion back of the moon-weeds.

"Let's drag him into the space ship," said Bru Wycoll, wiping perspiration from his brow.

"Be quiet!" I whispered tensely, drawing my blast gun. I gripped the triangular hilt so hard the metal bit into my palms. "I thought I saw some one then! It looked—like a woman!"

Maybe it was nerves; Bru laughed hysterically.

"A woman!" he snorted incredulously. "Wake up, ladies' man!"

"You fool!" I cried vexedly. "I'm serious! I knew there was other life here. I'm going to find who killed Krapelli. If I don't, I'll go mad!"

BEFORE he could do more than protest, I gained my feet and sprang up the path toward the moon-weeds. I had seen the elusive womanish shape a moment before, going back into dark shadows. The large delicate flowers of the moon-weed leered close, but I disregarded the open maws, slipped beyond. Presently, the leafy vegetation hid the space ship from view. I thrust back a clump of vegetation and peered in upon a monstrous, concealed cavern, from which a phosphorescent inner lighting glowed. The trio of stars were shut from view by the ceiling of solid rock. Back in the depths, a figure ran.

"I knew it!" I soliloquized. "Stop there, or I fire!"

I drew my weapon, leveled it, and sprang in frantic pursuit. I suddenly feared to let it get away from me. I was afraid of the cavern walls, afraid of the primitive moon beyond the aperture of the cave. She seemed ever to elude me, and as fast as I ran, just so much more rapidly did she go. Finally I drew up desperately, resolved to give my fugitive one last chance.

"I'll blast you into the next dimension," I yelled, "if you don't stop."

I didn't think the creature recognized the portent of my voice, but it stopped, turned around, with arms widespread, and I peered—

Yes, it was a woman—I don't think I really was sure of it until that moment. She might have been carved from some beautiful stone. Her brief garment was scant, as gossamer as the finest woven silk. A greenish cape was flung around her throat, somewhat resembling the calyx of a flower. I came closer to her. There was something heady in her perfection of beauty.

"You're a strange thing, running wild here," I remarked, and my voice was thick. She stood looking at me through heavy fringes of blue lashes. The phosphorescent quality of the cavern's walls was steady and restful in contrast to the

coruscating quality of the outer light. Her flesh was of roseate hue and her eyes were blue. The cavern's walls, now that I noticed them, were smoothly carved, as though by human chisel, and were tinged with frozen colors of mother-of-pearl.

Inasmuch as I want to get across my thoughts to you, I'll admit that Bru wasn't altogether aiming at nothing when he taunted me with the invective "ladies' man." I have seen girls on one planet and another. I had never before, in all my wandering, seen a girl who was shaped similarly enough to terrestrial man to even approach earthly girls in beauty and appeal until—

There's a first for everything. There are beautiful girls who seem cold and frozen, who are glittering but unattractive. Then there are other, not so scintillant, who may reach out and touch you with their finger tips, and set you blazing with inner fires. I make no excuses or subterfuges. She was like that, this girl of the caverns of Nircon.

"I knew there was life here," I went on, trying to hide my inner emotion. My admiration must have been apparent. "I've thought there had to be some animals, to balance off the plants."

It was inane, of course. She couldn't understand. I was born on a planet light years away across space. She was afraid of me. Some women possess a fright that is alluring. She stood trembling, her long slim hands raised in abject surrender.

"Don't be frightened," I cautioned, hoping to soothe her with my voice. "I wouldn't harm you."

She did not speak a word. She undid a metallic chain from her throat, thrust it toward me, motioning to herself and toward the chain. In the links of the chain were curious snail-shaped jewels, resembling blood-red rubies. I was shocked. I knew what she meant by her expression. She was a captive. She was surrendering to me. It was re-

vealed in every line of her delectable features.

Everything I considered superlative in female pulchritude stood before me. Perhaps the very perfection of her features should have warned me. Later I was to understand. She was tall, willowy. Her hair was of the prettiest coppery shade I had ever seen. She was barefooted, if one could take exception to tiny metalline sandals on her feet, which seemed transparent.

AFTER ALL, I am only a man. As she came toward me, thrusting her symbol of slavery, I seized her wrist, drew her swiftly toward me. Her curving, full-fleshed lips came up, not reluctantly.

I stood rigid, clasping her closely, drinking in such a sweet nectar of blissful emotions that I could scarcely move. Her eyes were as if in the throes of ecstasy. My mouth burned with nectarine excitement that spread down my throat. I will not deny that every atom of my being was affected in that abrupt meeting.

It was shattered by a sound. There came a harsh, strident squealing. I started, loosed the girl, stared back toward a turn in the cavern. A hexagonal opening in the cavern wall had opened. Through the black pit, a monstrous black demon was stalking, her yellowish glazed eyes set upon the woman I clutched loosely in my arms, who was now cringing.

This black demon, clothed but in a black leathern apron substance, was not of the same race as the fair creature I held in my arms. Her exposed limbs were black, and scaly like a reptile's. Her forehead was conical and ridged. Undershot lips flapped between jutting canine teeth. Her arms were long, muscled, like those of a man.

Again she shrieked in her garbled tongue. She raised her hand, in which was a peculiar star-shaped implement. The slave girl cringed away, whimper-

ing. That was the first sound she had made. It cut me to the core. "Don't fear," I told her. "I'll protect you, if it's humanly possible."

She seemed to have forgotten me, even though I knew she had been shaken in every fiber by our fierce insculation. Her terror held the upper hand. As she sprang away, the demon monster raised a hand, one of the points of the star-shaped object glinted with a green light, and the girl halted, motionless, her features constricted with paralysis.

It was a female demon, spawned from black limbo; of that I was sure. The blazing, three-cornered eyes looked me over, and I shuddered. No sound was made, but I can read expressions. There was a hungry look on the slaving lips. They trembled, drooled with greenish saliva. The monster had envied our kiss. She held out her arms, anticipating some action on my part. She seemed confident.

"You devil!" I blasphemed. "You incarnate fiend. I'll send you rightly to the eternal pits!" I jerked up my dissembler weapon, but in mid-air, a greenish glint came from the star thing in the ebony, clawlike hand. She must have been of the captor race, dominating this beautiful girl into subjection. I was determined to free the slave girl.

Fire bit into my nerves, slid along the tendons. I was helpless to move, clutched in the evanescent play of greenish-cold flame. No, I was moving, moving for the she-monster, opening arms that were without self-motivation, to embrace the scaly body. Though I was horrified, my body moved of other volition than my own. Each step was a torture, each moment an agonized eon. I had dropped my weapon.

The flaring nostrils stank in my own. Her bony arms reached out, plucked me close. Oh, Lord—

I can never forget the soul-racking sensation of loose lips pressed moistly

to my own, nor the knowledge of the rough, corrugated flesh, brushing lightly upon me. My consciousness itself swayed over the edge of nothingness. The outlines of the cavern swam mistily. Long arms held me securely, although I was struggling with weak futility against her.

I think that I lay for hours in a comatose condition. Only vaguely, I realized that Bru had found me. I could recall something hazily, as of him carrying me back to the space ship. For a long time I wanted to speak to him, but couldn't. Finally I got out of the swinging cot. My weight was light beneath me—artificial gravity!

"Bru, are we aspace?"

He nodded.

"But I can't go!" I ejaculated. "That girl, Bru—— She mustn't stay here. Not if——"

Bru looked down with a good-natured grin.

"Dreaming again, girl friend?" he inquired. "What girl are you talking about?"

"The girl in the cave," I stammered weakly. "Back behind the cliffs, where you found me."

"Take a nip of this," said Bru, handing me a liquid stimulant. "Now rest easy. There wasn't any girl. There wasn't anything. Nothing but the moon-weed, but that was some weed! You've had a pipe dream, whatever it is. Do you know where I found you, man? Wallowing around with your head stuck in one of those moon-weed flowers like a punch-drunk bumblebee!"

I SANK to the couch. A glance from a transparent port window revealed the truth. Up forward, I could see the control mechanisms set on our trajectory of flight. We were cutting across space, and the star cluster wherein revolved the moon, Nircon, about a dead star, lay astern, glittering against space like a far-flung chain of colored gems.

"You mean that I was doped?" I queried dumfoundedly.

"I guess you're right, kid," said Bru Wycoll. "Maybe I was pretty sore. But I couldn't help seeing you go off your head. Of course, you know that opium is extracted from the poppy on Earth, and that it induces extravagant dreams. So this wasn't so impossible.

"The flower is an organ evolved in adaptation to the advantage of the coöperation of two parent plants in the production of offspring. Now the moon-weed evolved on a planet where animal life must have been extremely rare, though it probably existed in the past. There were no bees, no insects to carry the pollen from the stamen of one plant to the pistil of another. Cross-pollination is the carrying or transference of the male germ to the female plant cell, where the fruit is germinated and formed.

"I saw you running around, like a chicken with its head off. Then you rammed your head in a huge flower, and began sucking the nectar. I caught a glimpse of your face, and it expressed nothing but rapture! I got a quick hunch then, for the odor was almost stifling. Maybe I was thoughtful because I was pretty mad just then. But I wasn't plunging headlong into anything. Then I noticed Krapelli, whose mouth was full of the nectar. So you see what happened?

"This flower attracts animals by doping them, by inducing hypnotic dreams. It is highly narcotic in effect. But do you realize the many traps the flower has devised on Earth toward the end of cross-fertilization? There are all sorts of beautiful colors in terrestrial flowers, to attract insects. They have nectar or pollen, which the insects and bugs love to eat. In other words, it is a complex organism designed to promote the cross-pollination of two flowers.

"But these plant blossoms had to work toward different ends on Nircon. In a

land of brilliant colors, their hues were of poor contrast. There were no insects, no birds. Perhaps there once was a race of highly developed beings, but I don't think they could have lasted long. Or maybe there are a very few of them left, enough to cross one of the moon-weeds every few generations. The moon-weed attracts creatures by drugging, by giving brilliant dreams, in which the victim is appealed to in every physical and mental sense, as, unknowingly, he accomplishes their fertilization."

I stirred. It was restful to get back to ordinary white light, even if cooped up within the confines of a space ship.

"I might have known that girl was too pretty to be real," I admitted. "I thought I was kissing her. That was when I was looking so rapturous. What a fool!"

"I wouldn't say that!" demurred Bru. "Remember, it would have appealed to the most vulnerable spot in the imaginative armor. If it had been I, the dream might have been different, but I would have been drawn inexorably, to drink of the fatal nectar cups. I investigated Krapelli!" He paused and glanced at me queerly. "Then I dragged him in and laid him on the bed. Krapelli's not dead. He's down tending to the photon rotors in low deck now. His heart had

stopped beating. Without immediate aid he would have perished from an overdosage of narcotics.

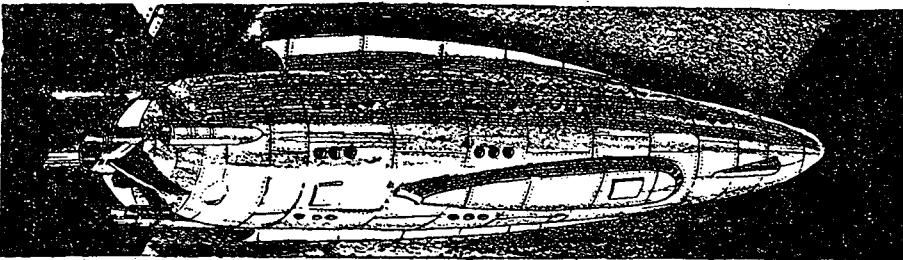
"I was wise enough to get an oxygen respirator tank attachment and strap it over my face and shoulders. Then I came for you. You had gone to the second flower and your countenance showed your repulsion. I had to knock you over the head to drag you away. And you've been sleeping for forty-eight hours, dead to the world. The effect has gradually worn off, however."

"What about the moon-weed, Bru?" I asked, at last.

"When we left Nircon," he replied with a tight-lipped smile, "there were two fruits on the moon-weeds. I left them there. It's a universal blessing that the fruit is not scattered over the universe."

That had been decent of Bru. Encumbered by my drugged body, and that of Krapelli, he had managed to maneuver our space craft away from Nircon. But then, we had always been friends. Those little spats came occasionally, but we dismissed them for the trivial things they are, between tried friends.

"If you keep going, Bru," I declaimed exhaustedly, from a more comfortable position on the couch, "you'll show signs of intelligence yet. When I feel better, I'm going down to see Krapelli."



Ships That Come Back

A Gripping Story of the Skyways

by Eando Binder

OFFICER SORREL groaned and raised his head. Everything swam before his eyes and he fell back weakly. Dimly it came to him that he had been knocked out—and badly. His temples throbbed with incessant hammers, and pin wheels shot before his eyes. Suffering comets! What aching torture!

But Oliver Sorrel was made of firm stuff. Gritting his teeth, he pushed his head and shoulders off the floor, with arms that seemed made of butter. The effort of will brought glistening drops of sweat to his forehead.

Cursing his weakness, he brought his knees up under his body. With another Herculean effort he straightened up and staggered to his feet. Then his clawing hand caught a safety rail on the wall just as his knees buckled. Holding himself erect by the strength of his arm muscles, he leaned against the wall, panting heavily.

There, that was better. Hanging grimly to the safety rail Sorrel felt something of his normal strength flowing back into his veins. His leg muscles stiffened and took the brunt of his weight. Like a delicious warmth, a growing power stole into his body. He was becoming a man again. What he had been there on the floor he did not know, but it hadn't been right. Even the pounding ache in his skull eased somewhat.

When his eyes had cleared sufficiently from mistiness, Sorrel glanced around the cabin. All was not in order. The space chart was lighted up and the gauge needles quivered nor-

mally, but the electric chronometer was dead, half the lights were out, and the air smelled foul. And there was an unnatural stillness—the engines were silent!

"Suffering blue comets! What in the——"

The first officer bit off his words and left his position by the wall. He swayed across the room in a long practiced spaceman's swagger, and found himself still unsteady. Then he kneeled beside Robey, the ship's captain. The latter, a gob of dried blood under his nose, was groaning and twitching convulsively.

"Steady there——"

Sorrel put an arm under Robey's shoulders and raised his head. The captain opened his eyes. Then he closed them again, moaning. There was a bump on his forehead as big as an egg, as though he had catapulted across the cabin against one hard beryllium wall.

"Captain, wake up! Can you hear me?"

There was an answering groan. Robey sent an exploring hand to his head. There followed a stream of muttered curses.

The first officer grinned and yanked him to his feet. Robey stiffened gamely, sagged once, and then straightened up. He shook his head and opened bloodshot eyes, blinking owlishly.

"What's up, Sorrel?"

"Don't know, sir. Can you manage?"

"Yeah. Blast this headache, though. What did happen?"



Something of a growl came from the massed figures. Like a flash, Robey whipped out his pistol, leveled it.

"What's the last thing you remember?"

"Talking to you. Then—well, I went out like a light!"

"Me too."

The two head officers of the freighter *Edison* looked at each other queerly. Then, as one, they swung around and strode to the secondary pilot board. Their eyes riveted to the space chart.

"Do you see what I see, Mr. Sorrel?"

"I see our course dot parading in forbidden territory, sir. Maybe it's misplaced from the true position."

"And again maybe not."

CAPTAIN ROBEY took a confirming glance. Then he whirled and dashed for the companionway. Sorrel was right at his heels as he climbed the narrow ladder to the pilot's cupola near the nose of the ship. Swinging open the door, they dashed to the pilot board. The space chart seemed to loom in their eyes as it showed the same crazy reading the secondary had.

Captain Robey faced his first officer. "What do you think, Mr. Sorrel?" He emphasized the pronoun as though he had his own conviction already.

"Looks bad, sir. Either we're dreaming or the chart's screwy. On the other hand, the blood under your nose is dried and caked. Which means you, and therefore I, have been out for some hours. Liska's out too." He pointed to the pilot's body, crumpled in one corner.

"Wish the chronometers were working," faltered the captain, unwillingly forced to the other's conclusion. "Queer that one of our electrical circuits should blow a fuse—so seldom happens. But you're right, of course; the engines are dead, so the crew is out too."

Avoiding the captain's eyes, the first officer picked the pilot's space-lightened body from the floor. Liska, a big but gentle-faced man, came out of his stupor with a faint groan.

"Liska!" The captain's voice was

tense. "What happened? Can you remember anything?"

The pilot licked a split lip. "Last thing, sir, I see a tenner on the chart. I warped course, captain, swung star-board ten points—should have passed it safely."

"Must have passed it safely," said the captain irritably. "Of course, or we wouldn't be here. But sure it wasn't more than a tenner?"

"Tenners and up are rare, captain," reminded Liska, lowering himself heavily into the swivel chair before the pilot board. He glanced apologetically at his dangling, left arm.

The captain, unnoticing, spoke: "Just where are we?"

Sorrel was already there, looking closely. A numbing sensation crept over his heart as he integrated their position, reading the degrees on the cross hairs of the chart, and transposing to miles from the scale below.

"What does it integrate?" asked the captain, trying to keep his throat from crawling at the sight of the first officer's grave face.

"Fourth quadrant, three degrees off ecliptic, sir. Six point zero two warp from the Saturn-sun line. Miles out from Saturn's orbit——"

"Yes——"

"Almost fifty million——"

"Liska, check!" The captain's voice was incredulous.

The pilot had only to glance at the chart. To his trained perceptions, the readings integrated almost simultaneously. "That's it, sir, as Mr. Sorrel read it. We've been unconscious, I should guess, about seventeen hours."

The captain leaned against the wall, shuddering. "Three degrees off ecliptic; six points plus warp—fifty million miles too far! We should be docking at Zarnoville, Saturn, at about this time. Instead, we're way out here, off course. That tenner must have——"

"Your pardon, sir," broke in Sorrel. "Look at the fuel gauges!"

Startled, the captain and pilot twisted their heads to see. The needle readings stared back—main tank, near empty.

That was as it should be. But: "Emergency tank—empty!" gasped the captain. He paled under his ruddy complexion. Liska turned a pasty-white.

Sorrel was the first to speak after a deathly silence. "Which means we're not only off course, sir, but in danger!"

THERE WAS a noisy interruption. A figure plunged into the room, stumbling. McQuale, head engineer, clutched at a safety rail, caught it, and pulled himself erect. Sandy hair matted with dried blood, he looked at the three men, panting.

"I'd like to know," he spluttered, "who clubbed my men, and me with—with a three-foot jet tube, I would. Devil take me, but we're a nasty bunch down aft—cracked skulls, sprained arms and legs, and a dozen bruises apiece. Like a cyclone blew us around, plague on it! And it looks"—his eyes went to Liska's limp and swollen arm—"as though things weren't so gentle up here!"

"We got it too," said Sorrel. "But the men, Sandy——"

"I got them all up and around," assured the engineer. "That is, all except Gordy. He's sorta—still knocked out."

"Killed?" It was the captain's voice, hoarse.

"No. Can't kill him so easy. Just out—probably concussion. He hit the Number Two fuel breech with his head, I think. I'll bring him around."

No longer panting, McQuale's voice had become laconic. "But now what's to be done, sir? Begging your pardon for asking."

His quick, intelligent eyes had taken in the situation at a glance. He had seen

the course chart; knew enough to realize they were far off course. He knew, too, better than any one, how empty the fuel tanks were. And he even noticed—by the way his mild, gray eyes peered at First Officer Sorrel—that there was a tenseness in the air.

The captain looked from one to the other. "We're in a bad hole, men, no use denying it. We're way out of radio range for help—at least twenty million miles.

"Mr. Sorrel, inspect the ship. See about the emergency tank, the burned-out circuit, and the air conditioner.

"McQuale, get your men shipshape and—better get your engines primed and fueled, ready for top action. I'll take over the pilot board at present. Liska, begin working a countercourse."

The pilot's face was twisting, revealing clenched teeth. "My arm's broken, sir. The pain——"

"To hell with your arm!" exploded the captain. "This is a case of life and death. You're a spaceman; show your grit. You got us into this, letting a tender graze us. It's up to you to bring us out with every trick you've ever learned in space navigation."

Robey's nostrils flared wide; his lips curled in something of scorn as the pilot, big as he was, shrank visibly into the pilot seat. "And if you weaken and faint—by Heavens. I'll have you slung out the G lock!"

"I won't sir! I'll——" Liska began working feverishly with pencil, navigation tables and desk charts. His left arm, swollen and useless, hung limp; it brought the sweat of agony to his forehead.

The captain swung on the other two. "I don't know how bad this is yet, not till I see the countercourse. But I can tell you it's going to be tight. Every man aboard this ship will have to be on his toes from now on." He paused, eyes hard. "All right, get going."

Sorrel and McQuale jumped to obey.

"And Mr. Sorrel," added the captain, "see about Professor Chesloe."

II.

OFFICER SORREL had plenty to do, inspecting ship. His heavy, iron shoes clumped noisily against the metal flooring in the hollowness of the narrow side passageways.

The fuse boxes of the *Edison's* duo-electrical system were in the bow. He found one set of fuses scorched and blackened. Somehow, that didn't strike him right.

Replacing them, he retraced his steps to the core of the ship and examined the air conditioner, finding its automatic feed valves jammed as though some giant power had slammed it with a brick. It had left only a tiny trickle of oxygen flowing out into the distributing system. They had been breathing the same air ever since the accident that had knocked them all out. Ten minutes with a wrench repaired the flow.

Sorrel went on, puzzled. He found the four huge gyros—which ran from individual battery supplies because of their importance—in smooth operation, whining plaintively. But when he came to the room which held the sizable emergency tank, he stopped short at the sight.

Some inexplicable force, working through hull and bulkhead, had ripped a seam. Because of the giant ship's own gravity field—concentrated appreciably to the forward bow—the almost weightless, but dense, liquid had seeped out and was now rolling in tiny globules over all the walls and floor.

Sorrel shook his head. Diligent effort might scrape together a few quarts of impure fuel, but most of it had by now gravitated into every nook and corner of the subcenter catwalks.

It took Sorrel an hour to peer in every part of the huge freighter, making sure nothing else had suffered damage. They

were lucky at that. The glancing crash, spinning the men off their feet against the hard, metal walls, had done little other harm.

Yet he held his breath, traversing the catwalks just inside the hull, fearing to hear a faint hiss. If the beryllium hull had sprung a tiny leak in whatever cataclysmic strain the ship had been through, then things would be bad. But all was shipshape.

He reported as much to the captain, who was straining his eyes on the dials of the pilot board. "Relief to hear that," said Robey. "Did you find Professor Chesloe?"

"No, couldn't see him around," said Sorrel. "But then I didn't go in either of the bunk rooms. Shall I see about him now, sir?"

Sorrel waited respectfully for an answer, but the captain, apparently forgetting the matter, asked instead: "What's your theory, Mr. Sorrel? That tenner grazed us? Bounced us lightly, but enough to knock us off course?"

"I don't know, sir," said Sorrel non-committally.

"Well, what else could it have been?" bristled the captain.

Sorrel shook his head vaguely. "It's my opinion, sir, that there are things in space—mysterious forces, I might say—that no one knows anything about. We might have run into something——"

"Into something not recorded in space annals, is that it?"

"My idea runs in that line," admitted the first officer. "How can mysterious and destructive forces get in space annals if the ships meeting them—never come back!"

Robey grinned mirthlessly. "Cheerful cuss, you are."

"I'll tell you, sir, what makes me question grazing a tenner. In the first place, any contact with a meteor that big at our speed—and its possibly as great counterspeed—would not simply bump us off course. More likely, sir,

it would bash in at least one hull plate and squash a bulkhead or two.

"The hull, though, is undamaged, smooth as a baby's skin. The strain indicators on the forward bulkheads register a couple of points—insignificant, of course. Then, sir, the one circuit was burned out by an outside agency; there was no interior short-circuit. Also, Liska is a triple-A pilot; he just doesn't let tenners get close."

Robey's face clouded. "Sticking up for him, eh? Think maybe I'm too hard; Sorrel, you talk too much. You're to obey orders, not air your pet theories."

THE FIRST OFFICER reached a hand for the safety rail, gripping it hard, squeezing the firm bar as though trying to crush it. He tore his eyes away from the captain's adamant ones and shot a glance to the desk at which Liska worked furiously with pencil and slide rule. For a moment a great anger shook the young officer, made his lips writhe. Then he relaxed. "Yes, captain. Your orders, sir?"

"I think you'd better go aft and see how McQuale is getting along. We must have those engines all primed and ready for——"

A new voice broke in, high-pitched. "What about me? You don't consider me at all!"

Robey turned his head to the doorway. "Professor Chesloe!"

"Yes, it's me. Surprised to see me, I'll wager. Forgot all about me, I dare say. You would have let me lie there dying, for all you cared. Can you vindicate yourself? No, of course not.

"First you fling your ship around—in spite, I'd say, knowing I'm new at this space traveling—and then you let me lie crushed and bleeding without a thought for me. Oh, my head is splitting! Besides, I thought we should be landed by now. See, my watch says seven o'clock. We were to dock at five."

"I'm sorry about the whole thing, professor," said the captain testily. "But I haven't got the time now to explain. Mr. Sorrel, show Professor Chesloe to the bunk room."

"But, Captain Robey, what has happened?"

"Explanations later," the captain said tersely.

"Are you being insolent?" demanded the little man irately. He barely came to Sorrel's shoulder. His pinched face worked alarmingly. "I'm a passenger, entitled to due respect. You can order your men around as you will, but I've paid for courtesy and respect!"

"You'll get it," returned the captain with a bark. He darted impatient eyes toward Liska's back. The pilot sat industriously working out his intricate space warps, teeth gripped tight to keep from yielding to pain. Watching him, Sorrel felt a great admiration. Space-men were certainly a game lot. But at the same time, he felt a subtle dread. Liska was carrying everything to the last decimal, was rechecking carefully—which did not look like good news.

Suddenly Liska swayed to his feet; Sorrel sprang to his side. The lone passenger of the *Edison*, about to retort scathingly to the captain's indifferent attitude toward him, instead stared, puzzled. The pilot held up the sheet of final computations. "Here they are, sir."

"All right, go ahead." Robey's voice was a mixture of testiness and instinctive dread.

Liska swallowed. "Way I see it, we can only rear-jet into our course."

Robey forced a wry grin. "How about a long arc swing in toward Jupiter?"

"Out of the question, sir. Fuel reserve too small."

"Well, got it all worked out?"

"Yes, sir. To save time, we can rear-jet at extra timing. That'll stop our velocity with respect to Saturn in four-

teen hours. Then we give a final push-back."

"Final push? What do you mean?"

"I mean, sir, that fuel is very low and——"

"But surely we've got enough to get up some speed back to Saturn! Don't stand there and tell me——"

LISKA'S FACE grew suddenly purple and he clutched at his wounded arm. "We'll be damn lucky, sir, if we get that final back push!" With a little moan, he fainted. Sorrel eased him into his chair.

"Mr. Sorrel, get the first-aid kit," said Robey. "We've got to doctor Liska. He's indispensable now that we've got to back-track. You and I can handle straight course, but no swing ship."

Sorrel returned quickly. Without a word Robey opened the first-aid kit. With Sorrel's help, he set the broken bone.

"In bad shape," muttered the captain when it was done. "Best thing for him would be a hospital. I'll give him a shot and bring him to. After he's set course, you and I will take alternate relief at the pilot board. And, Mr. Sorrel, you'd better go down aft now and pep up the men. Don't tell them everything. Let them think we've got plenty of fuel, or there'll be hell to pay. Tell McQuale to stand by for action in the engine room."

"Right, sir," Sorrel left.

Captain Robey turned back to his chart. Carefully he looked over the luminescent quadrant sections in front of their course dot to make sure no fiver or larger meteor was in their path. Warning always came at least five minutes before time, leaving plenty of time to warp course and avoid danger.

The space chart was a miraculous instrument—perhaps the one most important item to space travel next to the fuel. The principle of supersonic radio

waves, reflecting from bodies ahead, spotting the danger on a luminous chart, was beyond Robey's mental attainment. But he admired things he could not understand.

"Forgotten me again!"

Robey started. He had indeed. "Now, Professor Chesloe——"

"Just a minute." There was a new note in the little man's voice—a sort of hollowness. "I've heard certain things, captain, and guessed the rest. It seems we're in a dangerous predicament. Right?"

"Yes, you can't be fooled now. I had planned to keep the facts from you."

The professor boiled up. "Afraid I'd weaken—turn coward?"

"Before this trip is over," said the captain ominously, "we're going to find out if there are any yellow streaks among us!"

The volatile professor sobered. "Anything I can do?"

"Not a thing—yet."

"Yes, there is," returned the other brusquely. "I hereby appoint myself caretaker of Liska. I can hand him his food, water to drink. I can help out in little ways, can't I?"

Robey looked at the little professor queerly, but said nothing.

III.

SORREL crawled agilely down the companionway ladder. He cursed at the pain in his bruised body from the knock that had spun the ship off its course. He heaped revilements, too, on the ache that persisted in his head.

In the engine room he found Sandy McQuale and his seven hearties in a group, vehemently discussing the state of affairs. All of them showed the marks of the catastrophe that had tossed them about in the ship like sacks of meal. One man lay still in the side bunks, pale of face. A sudden silence fell over the room as Sorrel entered.

"Stand by for action, men. We'll swing ship and back-track any minute. Engines all primed?"

McQuale waved an arm to include the quadruple jet systems set in the stern wall, which was the rear of the ship. Mighty feeder valves open, solid spark chambers intact, long slim jet tubes vanishing into the back wall, the powerful machines looked ready to drum into their throbbing song of power—rocket power—the power of a liquid to which nitroglycerin was so much finger snapping. Slung in their sprung holders above were the fuel chambers, which had to be refilled periodically from the main tank to the fore part of the ship.

"All primed and raring to go," assured McQuale. "And the sooner we gets going, the better. How about it, men?"

A murmur of approbation rose from the grimy tenders.

"I told the men you officers don't rightly know just what happened back there when we were jetting peacefully enough from Jove Station to Zarnovillo. Some of them were even a wee bit panicky about it, wondering where we were at. I says, wherever we're at, we're not going to stay long, and we'd be getting along just as soon as the captain and Mr. Liska plotted back-track. Nothing to be alarmed about, is there, Mr. Sorrel?"

There was just the faintest flutter of McQuale's eyes, facing the first officer. Sorrel took the cue. "Why no, of course not." He forced a laugh that sounded genuine enough. "It is a fact that we're a bit in doubt as to how we got sidetracked, but we'll be back toward Saturn any minute now. The whole thing amounts to just a delay."

Sorrel then pulled the head engineer aside after McQuale had sent his men to stand by at the engines for immediate action. "Any trouble, Sandy?"

"No! Except they are a bit nervous.

A plague on them! But I can handle them, don't worry."

"How about him?" Sorrel jerked his head toward the man in the bunk.

"Got a good knock on his dome," drawled the engineer. "Robey better look him over first chance he gets. Say, Mr. Sorrel"—he lowered his voice—"I ain't exactly dumb. It's going to be tight—getting back?"

"Too tight for comfort, Sandy."

McQuale nodded soberly. "I don't want to be impertinent, Mr. Sorrel, but the captain had better begin thinking about the cargo question—understand what I mean?"

The first officer carefully picked a thread off his coat sleeve. "Captain Robey always thinks of those things in advance, Sandy."

The engineer squinted. "He thinks with his head, but not with his heart." He was about to say something further when the attention bell rang loudly. Sorrel left and made his way forward. As he entered the main cabin, Captain Robey, who stood tensed before the secondary pilot board, motioned toward the master controls.

"That tenner pulled us fourteen degrees out of line." His voice was hard with a trace of impotent anger. "Fourteen degrees—gyros, momentum, and all. And this is rated as a pretty big ship in space commerce! Damned if I don't think that tenner was made of solid lead!"

Sorrel hid a steely grin as he stepped before the master controls. It was good now and then to see a cocksure captain up against one of the many inexplicable mysteries of space.

EYES on the dozens of dials and gauges, Robey barked into the intra-phone system of the ship: "Pilot room, ready?"

Liska's voice came back, pain-twisted: "Ready, sir!"

"Engine room, ready?"



"We'll be damn lucky, sir, if we get that final back push!"

"Right, sir!" came Sandy McQuale's phlegmatic tones.

Robey then glanced with arched brows to First Officer Sorrel at the master controls. Sorrel nodded, grimlipped.

"Stand by for top action!"

There was a moment of absolute silence all over the ship. In itself it was

nothing extraordinary. The swing ship maneuver was used by every ship not equipped with fore rockets for landing.

In this instance it meant far more than merely switching tail and nose fourteen degrees. It was the frantic attempt of a ship off course—and, worst of all, barren of fuel—to get out of alien territory and back into its normal sphere



With a little moan he fainted. Sorrel eased him into his chair.

of the void. Saturn's sparse settlements were mankind's farthest reaches outward from the Sun. The freighter *Edison* was much farther.

Captain Robey parted his lips in his customary commanding voice, half bark, half snarl: "Cut gyro!"

Sorrel crooked his elbow, jerking over a large lever, notch by notch. The in-

animate silence of the ship was disturbed by a high-pitched whine that rapidly sank in tone and finally moaned to nothingness.

"Double-floor gravity!"

Again Sorrel acted at the main controls, shifting a rheostat handle that pushed twice the normal electric power through the powerful floor magnets. It

would take a major shock now to dislodge their steel-shod shoes from the grip of the magnetized floor plates.

"Engine room attention! Attention, Liska! Feed tenth-norm jets at starboard; ten degree oblique per minute!"

Then the silence was shattered by a muted thunder from aft, as Liska, up forward, adjusted his levers. Down below, McQuale darted his hawklike glance over the panel of indicators which showed in detail the exact output of each engine—each individual jet, in fact.

The huge ship, like a sluggish whale immersed in heavy oil, ponderously swung its nose sideways to the terrific forward velocity. It seemed to resent being forced out of its natural groove, but the snarling, flaming port-side rocket jets left no choice. The huge space craft, although weightless, had a gigantic momentum—a product of its great mass. This momentum the throbbing engines had to combat in swinging nose and tail even a little.

Captain Robey saw a dial needle quiver at the number eleven, then crawl crazily past twelve and thirteen. "Attention, Liska! Cut to-eighth norm, at starboard, reduce oblique to six!"

The humming thunder from the rear rose rather than died lower; a new bank of balancing jets at starboard had joined in the battle, imparting a slight upswing—up being toward Saturn.

For perhaps ten seconds the process went evenly, and one and all they could feel a slight port-side list as the mighty beryllium craft picked up a twisting momentum. Its nose subtended the black arc of space, cutting the constellations sharply.

IV:

CAPTAIN ROBEY watched his indicators closely, hands firmly gripping the wall safety rail. A wrong blast now, the slightest of misapplied forces out in frictionless space, would throw

the ship's radial axis out of line. That would necessitate the use of more fuel to right the ship. And fuel was precious, more precious to them at the time than even their entire cargo.

"Attention, Liska! Increase to nine point five norm at starboard, reduce oblique to four. Stand by for tangent in ten seconds!"

The pounding engines abruptly eased their mad rhythm. But there was no jar. In space with no gravity, motion accelerates or decelerates smoothly. The mechanics of inertia and momentum and weight-free mass are a system of motion as uniform as a flowing river.

"Ready for tangent; watch it—plus four-three, fourth quadrant!"

With a sullen roar the aft blasts crescendoed angrily; the *Edison's* nose tilted upward to the ecliptic plane of the solar system, slowly and evenly—the motion dying at the precise moment that the longer axis of the bullet-shaped ship had paralleled the plane.

"Stand by, all hands, for final orders!"

Captain Robey's eyes fairly flew over his instrument panel, fixing each number for but an instant. "Attention! Full blast at port side, double norm. Cut starboard two seconds later!"

Only a triple-A pilot could have done that last delicate trick, stopping the great ship's up-and-around swing at precisely the point necessary. The final powerful jet stream that arrested the turn produced a thrilling surge of deceleration.

"Sorrel, gyro!"

The first officer slid his lever over carefully. The ship seemed to shiver an instant, then locked into space. Four mighty gyroscopes now held the *Edison* in its new groove.

Robey squeezed his sweating fingers, sighing in relief. He spoke then, hoarsely: "Pretty good, says I. As smooth as the straight about ship between planets."

AST-4

"Liska showed his triple-A rating," commented Sorrel.

Robey frowned. Then he turned to the phone: "Attention, Liska! Back-track as per course sheet. Give her extra timing."

Strangely, there was no response from the engines.

"Liska!"

A voice came from the phone, quavering: "Liska's fainted, captain! Better come up and see about him. He was too weak even to pull the last lever; I had to do that!"

Captain Robey banged his palms together. "Liska out again! I thought he was a man!" He looked at Sorrel, black brows contracted. The first officer avoided his eyes, but he said quietly: "Liska got the worst of any of us in the shake-up."

Robey pushed his face forward, aggressively. "Still sticking for the under dog! I know human nature, Sorrel. A captain gets to know its wide varieties, and the symptoms of a yellow streak. Do you know why Liska is falling apart—inside? Because he realizes, better than you and I even, by what a slim margin we may pull back to Saturn—if we do!"

"We may have to toss out cargo," returned Sorrel bluntly.

The captain's face grew livid. "You dare—" He choked. "Listen, Sorrel, captains who throw out cargo are branded for life. They sink to gutters. They end up in spacemen's dives, objects of scorn. The space code is hard, pitiless—but glorious! I will live up to the last dot of the code, not because I fear disgrace, but because I believe in it."

Sorrel gave his superior eye for eye. "Those captains who have tossed out cargo to bring in a disabled or under-fueled ship, did not do so willingly. Crews have a code of their own!"

"And the first rule is: 'Save my own precious skin,'" spat out Robey with in-

finite disgust in his tone. "Bah! A dead man is worth two living cowards."

Then the captain's face grew flinty: "And remember this, Sorrel. The *Edison* docks at Zarnovillo with full cargo or it doesn't dock at all! Now dash up to the pilot room and give her extra timing. And see about Liska. I'll take a three-hour trick at the space chart down here."

Sorrel left expressionlessly. But within himself he wondered what the outcome of the strange drama would be. A crew of men to whom the breath of life was important; a captain whose stern code held life cheaply. There would come a crisis.

IN THE PILOT CUPOLA Sorrel found Professor Chesloe nervously rubbing Liska's forehead with a moistened handkerchief. He looked up mournfully: "This man isn't only bruised, Mr. Sorrel. He's running a fever. Might have internal injuries."

Sorrel stepped to the pilot board, called McQuale for warning, and brought the engines to roaring life at double the usual rate. Then he turned to the unconscious pilot. "You think, professor, he's in a bad way?"

"Look at his face," spluttered the little man. "No man in half-decent condition would look that bad. I would say he should be put to bed and attended to. He's obviously unable to carry on. Why, his face was a mask of agony while he carried out Captain Robey's orders."

Sorrel turned to the desk phone, to notice, with a little shock, that it was open, connected to the captain's cabin below. "Captain Robey—"

"Yes, I heard Chesloe's report," came Robey's voice metallically. But behind the tinny tones there was a cold rage. "In a bad way, eh? Well, I'm no regular doctor. I've done what I could for him, fixed his broken arm. And since there is no one else here can do any more——"

AST-5

Professor Chesloe sprang to the phone, thrusting out his lips as though about to bite into the mouthpiece. "You don't have to be so brutal about it, Captain Robey! I heard before I took passage on the *Edison* that you were one of the hardest captains in the service. Believe me, sir, you are all of that and more. In the name of humanity, I demand that Liska be relieved of all duty and be taken care of, somehow."

A dry, harsh chuckle came from the phone. "Hard, am I? Maybe you don't know how hard I can be! Well, if you're so concerned about the man, professor, I leave him in your hands, if you care to——"

"I do and shall!" barked the little man. Sorrel snapped the instrument off before the fiery professor could say more. Chesloe glared at him.

"Is your captain a man or fiend?" he asked heatedly.

The first officer shrugged. "You're not used to the frank reality of life in space. Out here we cannot play act. The stern job of coaxing ships across the void leaves no place for sham or pretense."

Chesloe quieted down, shaking his head. "But he hates Liska. Why is that?"

"Always did, I think," replied Sorrel. "Then this incident which threw us off course—— Robey believes Liska to be responsible."

"And what do you believe?" asked Chesloe curiously.

Sorrel shrugged. "Liska is a master pilot."

The volatile professor had become suddenly thoughtful. "I say, Sorrel, how do you account for the fact that every soul aboard this ship was unconscious for exactly seventeen hours? That's a long time to be unconscious and for every man to be——"

Sorrel looked up startled. "Suffering comets! And that fits in with my idea!"

"Which is?"

The first officer looked at the little professor a moment speculatively. "That a mysterious force, probably emanating from that meteor we passed, played some queer pranks with us. It blew out a circuit, ripped the emergency tank to hell, threw us off course to an incredible extent, jammed the air conditioner, and put us all out for exactly seventeen hours!"

Chesloe looked puzzled. "I never heard of such a force. I don't claim to know much about space travel, but I do know a good deal of space theory, and I never heard of it."

"No one's heard of it," said Sorrel. "But then, man doesn't know everything yet about space. I may be all wrong, but this is sure—it was no ordinary thing put us in this predicament."

They turned suddenly at a groan from the pilot, limp in his seat. His head bobbed back, and he twitched his bandaged arm. "Down to the bunk room with him," said Sorrel, picking him up bodily.

-V-

FOUR HOURS LATER, the *Edison* still streaking backward with decreasing velocity, the even roar of the engines became spasmodic. Sorrel, at the space chart in the pilot's cupola, cut the power with a hasty snap. He switched on the phone. Before he had a chance to speak, Captain Robey's angry voice bellowed out: "What's up now? McQuale! What happened down there?"

The chief engineer's voice came through the wires, sadly: "What I feared, sir, plague take it! B-engine blew a breech head!"

"But why, man—have you been careless?"

"Not me, sir. Must have something to do with the crack-up we had."

"Well, fix it up. Mr. Sorrel, put in engines A and C."

"Begging your pardon, sir," came McQuale's voice quickly. "There ain't no fixing to be done! The blow-out cracked three jets. B-engine is a goner till we dock and get her overhauled."

Captain Robey groaned. "More time wasted! All right, Mr. Sorrel; we'll have to limp along with two engines."

In response to the first officer's manipulation, the throb of the rockets again burst out. But now the ship ran at only half power. With B-engine out of action, engine D was automatically useless. Sorrel stared at the space chart cheerlessly. Now, more than ever, was their case precarious. They had really needed the quadruple engine power to cut their terrific velocity away from Saturn.

Two engines could do it, with the same fuel supply, in twice the time—theoretically. Actually, because of an involved momentum-relative-velocity equation, there was a mileage loss, not great, but looming vastly important in their unhopeful situation.

When Captain Robey, red-eyed from a short cat nap, took over the space chart two hours later, Sorrel went midships to the bunk room. He found Professor Chesloe staring wide-eyed at Liska's still figure in a bunk. Sorrel read his horror-stricken eyes, took a confirming glance, and then quietly motioned for the little man to follow to the captain's cabin.

Robey took the news in an angry calm. "Liska dead, eh? I had an idea he couldn't stand the gaff."

"Well, after all," bristled Chesloe, outraged, "it wasn't Liska's fault! The man didn't want to die! Internal injuries would kill any man."

"He died from fright, I say," stated the captain. "Mental suicide. Because he knew we had no chance to get back!" Robey twisted his lips in a ghastly, mirthless laugh. "No chance at all! I checked his figures an hour ago. He

had the decimals padded in our favor, but it read the same.

"We will reach zero velocity, relative to Saturn, in ten hours. And then we'll have just enough fuel to give one hearty shove back where we belong. We'll crawl back to Saturn, slowly but surely. But it will take three months!"

Sorrel's spine crinkled. Chesloe gaped and stammered.

"Of course," said Robey maliciously, as though enjoying it, "we aren't rationed to last one month, much less three months. The *Edison* will be our coffin!"

"My Lord!"

THE PROFESSOR had found his tongue. He glanced from one to the other, saw the captain stony-faced, Sorrel white-faced but steady. "Good Heavens, Sorrel! Tell me the captain's crazy! It can't be! Sorrel, that isn't true, is it!"

The first officer nodded almost imperceptibly. Captain Robey turned back to his chart with an expression of disgust. His voice came to them, although they could not see his face. "Afraid to die—the both of you. Fearing that inevitable end of existence that all men fear. I don't look at death as something to fear. My only concern is that I die in honor, discharging my duty as best I can—a man to the last breath! When it comes is unimportant."

Chesloe stared at the back of the captain's head as though striving to pierce into his mind and fathom his peculiar philosophy of life and death. But he gave up in bewilderment.

"That's your viewpoint!" gasped the little man. "But what about us? What about your men? You can't follow your own steel code without a thought for others! You must dump cargo! Yes, I overheard your conversation with Sorrel on that; the phone was open. You must dump cargo!"

The captain whirled in livid fury. "Never! We go back to Zarnovillo

with full cargo, dead or alive! I am master of this ship!"

"Not a master—an insane tyrant!" screamed Chesloe, his nerves snapping brittlely. "You should be behind bars as a monomaniac, one who thinks he dominates slaves instead of free men. What cold reasoning can stack a cargo against ten human lives!"

The captain's huge bulk loomed suddenly over the little professor, fist upraised. Chesloe choked but did not flinch. Somehow, there was something of amazement, as well as fury, in the captain's eyes. Sorrel stepped between, gray eyes level with those of the captain.

"I wouldn't try that, sir," said the first officer firmly.

Robey relaxed. "Still for the underdog, eh? First Liska, then him—I suppose next the crew will go woman. Get out, both of you!"

Sorrel half dragged the little professor from the room, and took him aft to the bunk room.

"I'm not afraid," spluttered Chesloe, sinking to a bunk. "Not afraid to die. But I can't see anything as unhuman as Robey, willing to sacrifice life so cheaply—to a senseless, meaningless code. Isn't there anything we can do?"

"About the captain? No. He's boss with a capital 'b.' I have to side with him whatever my personal opinion. But he's not insane, Chesloe. It's just his passion for the system whose cold standards he's followed for forty years. His heart has become cold and hard, tempered by bleak space itself—but I have to admire him!"

"What about the crew?" asked Chesloe. "Do you think all those men will take it so calmly, when they find out?"

"That's what I wonder," said Sorrel, his face moody. Without a further word he tumbled himself into a bunk, falling asleep with the hardened ease of the inveterate spaceman. Chesloe

laid himself down ~~recently~~, trying hard to forget the corpse in the corner bunk.

EVERY THREE HOURS a buzzer signal rasped harshly in every part of the ship. It was the relief change. Spacemen slept three hours out of every nine. First Officer Sorrel gulped down his tasteless biscuits, dry but highly nutritious, and made his way forward. As he passed from the officers' bunk room into the main companionway, he heard a subdued murmur coming from aft, and the sound of clumping shoes. Sorrel whistled to himself and fairly ran toward the captain's cabin.

He entered precipitately. "Your pardon, sir, but the crew is coming forward!"

Captain Robey made an instinctive movement toward his hip holster. Sorrel noticed with something of a shock that a pistol stock stuck above the leather. Captains, armed themselves only in very alarming circumstances. But then, crews came from aft, in a body, only in equally precarious situations.

"Sandy" McQuale was at the head, grim-faced. Behind him was his full complement, seven men. Their faces had a half-abashed, half-determined look. Sandy stepped a little way into the cabin. The men clustered in the doorway.

"Spit it out!" growled the captain without preamble.

"Begging your pardon," began the Scotch engineer mildly, "for thus intruding in your office——"

"Get to the point," commanded Robey coldly.

"Well, my men," continued McQuale, "are getting a bit restless, wondering what is going on forward, and what all is in the wind for us aboard this ship. Plague take it, I assures them again and again it's simply a little off-course matter, but they want assurance, sir, from your own mouth, begging your pardon."

Captain Robey burst out into a roar. "Assurance of what? You men are tending the engines, not cracking your brains about course! That's my work and Sorrel's. Your job is to keep your engines going, whether I pilot you to hell and back!"

"Oh, we understand that, sir," said Sandy calmly. "But this trip being a bit different from the others, my men were sort of wondering if they could find out——"

"We want plain figures on the return course——"

"And whether we have to dump cargo!"

Two voices from among the crew had supplied the words which McQuale had been loath to use.

Robey's face went red. His eyes glanced accusingly at the first officer. Sorrel whitened in rage and gripped the handrail in back of him fiercely. The captain thought——

"Before you dump cargo," said Robey, his voice crackling through the tense silence, "you must dump my dead body! Now get back to your jobs, every man of you!"

Something of a growl came from the massed figures. Quite by accident McQuale stumbled forward, pushed off balance by an inadvertent elbow from behind. Like a flash Robey whipped out his pistol, leveled it.

SOMETHING seemed to snap in the laconic Scotchman at the sight of the pistol so coldly aimed at him. "You may as well know, Captain Robey, that my men know we're short of fuel—mighty short. One of them spoke to Liska before he died; Liska gave him the plain facts. To be brief, captain, it's dump cargo and——"

"Yes, dump cargo!" came a chorus from behind the engineer.

Robey's beefy face ran a spectrum of colors and finally became dead-white. A tempestuous rage smeared his features

into a mask of devilish fury. Sorrel, at his side, clutched his arm. Robey shook him off fiercely, took a step forward, menacing the men with his pistol.

There was a flurry of movement among the men facing the gun. Long hours of brooding and talking over the grim doom facing them had given rise to desperation. Sandy flung his arms wide, tried to block the forward surge of maddened men. Sorrel's eyes widened as he saw a smaller figure pushing forward among the men.

In split second action Captain Robey, with a sneer on his face, had aimed. First Officer Sorrel made a useless dive for the gun. A shot rang out, but the bullet that was meant for the mutinous crew lodged itself in another heart.

Professor Chesloe, a stunned surprise on his face, staggered forward. Sorrel caught his falling body. Captain Robey stood with the smoking pistol, bewildered. McQuale and his men remained frozen at the door.

"How—how did this happen?" gasped the captain.

Professor Chesloe straightened in Sorrel's arms, resisting his effort to carry him away; his pinched face, a deathly white, raised to the captain.

"I'm not afraid to die, captain," he whispered, a tiny smile twisting his lips. "That's your code, isn't it—not to fear death? Just so it comes with honor?"

"Lord!" Robey could say no more.

Chesloe made a strange little whimper, and spoke again: "Not to fear death—with honor—good code—captain——"

He tried bravely to say more, but a welling of blood filled his mouth. Death sealed his eyes and lips. And in that minute between the shot and the little man's death, some metamorphosis went on in Captain Robey's mind.

"Yes," he said, after a long, unbroken silence. "Yes, a good code—but the price——"

A fire seemed to die in Robey's hard eyes. Presently he said, in a strange

tone: "We dump cargo! What cold reasoning——"

He was thinking, of course, of the little professor's own words. The men at the door coughed, staring at the bowed head of the captain, waiting for definite orders to toss out the cargo. But Robey had more to say.

"He wasn't afraid to die, was he? He gave his life for you, men, remember that. It was mutiny from a crew of white-livered cowards, and the bravest man aboard ship had to die. All right, get out! Mr. Sorrel, superintend in the cargo hold. It's my orders, so you won't be held for it at port."

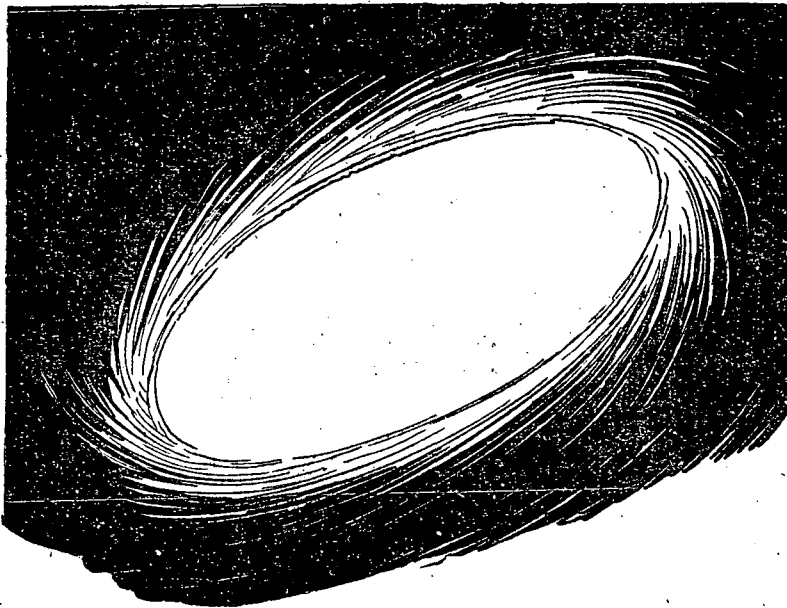
The first officer watched the men file away—both subdued at the death of Chesloe, and overjoyed at the thought of being saved from a ghastly fate. Sorrel had stayed to say something, but the captain frowned forbiddingly, tersely commanding him to go. Down in the hold the crew sweated with a will, packing the sundry boxes and bales in the

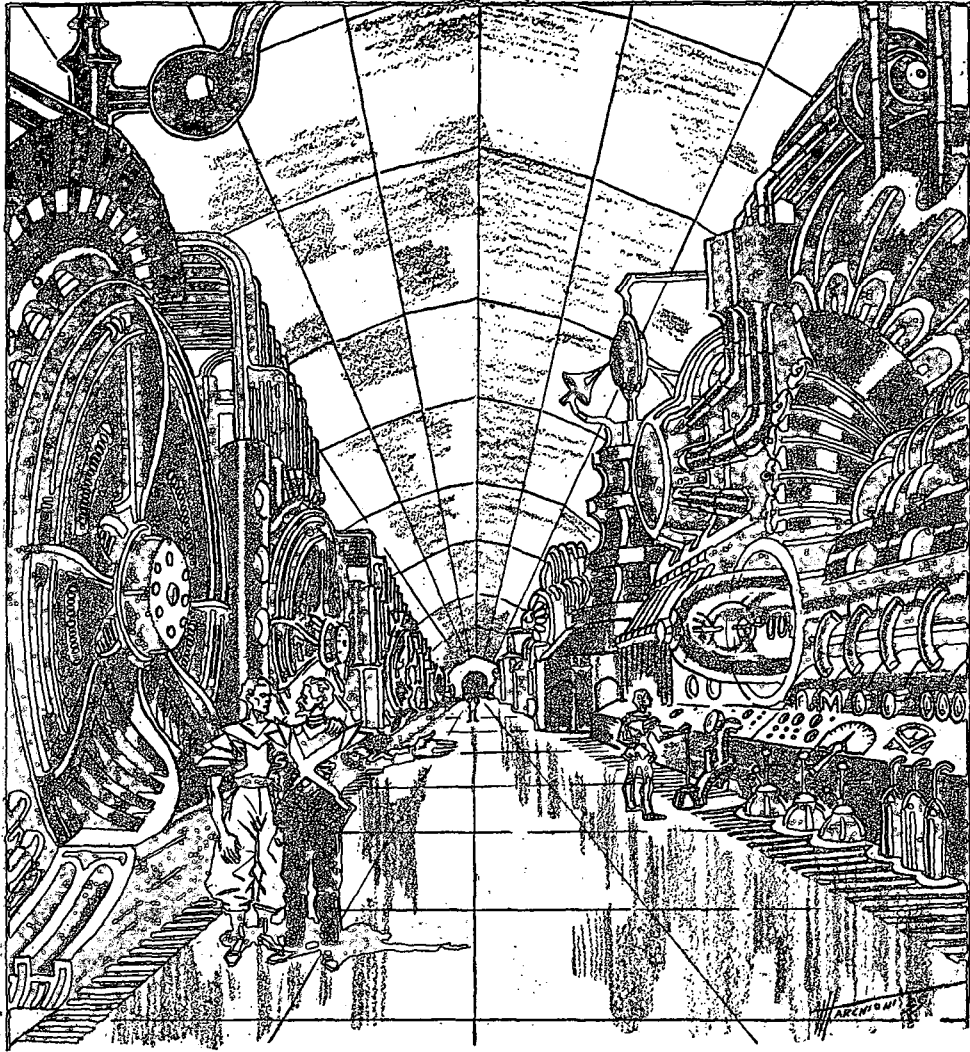
side locks where a man in a space suit methodically shoved them free of the ship.

Sorrel, in charge of the work, heard the faint shot from forward. He knew, too, what it signified.

The *Edison* limped into port two weeks later, minus a cargo, captain, pilot, and the lone passenger she had carried leaving Jove Station. Somewhere out in the brooding void floated what had been in her hold, and not far away three gray-shrouded bodies. For it was bad luck, as the crew agreed, to carry back to port any person dying en route.

First Officer Sorrel, protected from stigma by the captain's official log, absolving him from connection with the release of cargo, stared back into the gloomy space from which he had just come. He had just gone through one tiny chapter in the saga of space travel. He felt that now, more than ever, had the pitiless code of man's advent into space fastened itself to him.





When the Cycle Met

by David H. Beaumont

THE SUN had grown old. Throughout the interminable centuries it had followed that downward path which is the fate of every incandescent body of the Universe. Until now, at high noon, it glowered a dimly red disk that sent

shimmering shadows dancing across the snow.

Snow? Rather it was the lifeless corpse of a dead and frozen atmosphere that covered the Earth to the depth of several hundred feet. For with the passing of the Sun had come the great

cold. Only in the nine great population centers, crystal-inclosed as they were, did man struggle vainly against coming doom.

High up in his great control tower, a mile and more above the city, Lotar Kavic, chief executive of the sovereign city of Nark, paced the floor restlessly. A buzzer sounded; he threw a switch and a voice flooded the room.

"Observatory reports still no trace of Pluto, sir." He snapped the switch off almost viciously and resumed his pacing.

What had happened to Pluto? Far out on its orbit, almost directly across the Sun from Earth, the planet had suddenly disappeared from the eye of the telescope. Communication had ceased. Rocket cruisers in the vicinity of the planet were missing. Others, farther away, scurried home with the report of the planet's "going out like a light."

"Going out like a light," described it. The planet and its owl-eyed inhabitants had gone in the snap of a finger. Not like Mercury, which had plunged into the Sun twenty-one centuries before. Men had anticipated its end long before it happened. Its lizardlike people had known it when they elected to die with their planet. Pluto had merely "gone out like a light"—and Lotar Kavic paced the floor.

Far beneath him the atomic generators groaned with their ever increasing task of heating the huge city. The room trembled with their hum.

Lotar Kavic's life had always been like theirs, an ever increasing burden from one day to the next. A direct descendant of Sodan, the law giver, he had been early recognized as the greatest leader of the system, and as such, most of the task of guiding the people as they fought certain death, fell to his lot.

He strode to the window and looked out. From his vantage point, the city

spread out like the spokes of a wheel to the confines of the crystal dome. Beyond, stretched the lifeless fields of "snow." Above, the noonday sky was blue-black, stars twinkled dimly. Different stars they were from those which had looked down on the discovery of this continent of America, thousands upon thousands of years before. The solar system had traveled an unthinkable distance since that time.

Now the Sun was nearly spent. The planets too were near their death. Only he and a few of his trusted aids knew the terrific amount of energy being consumed daily in keeping the city alive. And now, what had happened to Pluto?

A red light glowed on his switchboard. He stepped over and pushed in a plug. "Rocket Cruiser A340XB three hundred thousand miles off Neptune reports that planet's abrupt disappearance three minutes ago. Am returning to Venus immediately."

Lotar Kavic sat a moment, stunned. Neptune, also across the Sun from Earth, had "gone out like a light."

Sixty-four hours later it was again high noon. Lotar Kavic was holding conference with the high commands of the six remaining planets.

Nenuni Kuk of Venus was speaking: "It appears to be an approaching wall of oblivion." He shivered. "If it is, Venus will be next, as you fellows are all on this side of the Sun."

Thoric, of Jupiter spoke up, "Perhaps it is better if we go this way. Death, as we know, is only a matter of time."

"And even the time grows short," put in swarthy Lukik, of Mars. "The Sun is cooling faster than ever before."

"It seems almost as though the cold of space were getting a hold," agreed the master of Saturn.

"My generators will soon get a much needed rest." This from the bold son of icy Uranus, his huge eyes wrinkling in silent laughter.

Lotar Kavic rose to his feet. The others knew that he had come to a decision and they were glad it was so. The lines of his face, deepened from years of heavy burdens, seemed even deeper in this moment of stress.

"Gentlemen, there is no doubt in our minds that this system is doomed. We could not exist without the Sun so why should we fear this new peril? Why not praise it as a fitting end to our long struggle? Let us announce the facts as we know them to our people and prepare to die like men. I know," he spoke proudly, "that my people on Earth can face oblivion as bravely as did the lizard folk of Mercury twenty-one centuries ago. This is the counsel that I offer you; let us act upon it."

Nenum Kuk, always the impetuous and dramatic, stood up. "I vote 'aye' to that counsel. I go now to prepare my people for death and my planet for destruction." He turned and strode from the room.

Four days later the gray orb of Venus winked out and the remaining planet waited breathlessly for the next blow to fall.

Lotar Kavic drummed impatient fingers on his desk and glanced at his timepiece. If his calculations were correct, the Sun should cease to exist in exactly three minutes. Slowly the seconds crawled by. Suddenly he sprang to his feet; the time had come and the Sun was gone. Not a trace remained where it had glowed redly in the sky only a few seconds before—

THE THOUGHT that only a day and a half of existence remained to them, threw the characters of men into bold relief. To many, the disappearance of the Sun was the last straw. They gave themselves over to the mad revelry which has always been the subterfuge of certain types of man in time of great stress.

Others, in direct opposition, walked

the streets in studied indifference. While still others went about their work with the same zest with which they had followed it all their lives. These were the scientists of the planet who worked diligently and hard to find a cure for a situation which had no cure.

The main body of people, however, the strong middle class which had always been the pride of Earth since the days of the first rocket ship, spent their time quietly at home with their wives and children.

Lotar Kavic was making his last inspection. He stepped into a lift and was dropped far beneath the surface of the Earth to where the atomic generators labored at their task. He stepped out on a platform that fairly swayed with their terrific pounding. He walked to where the superintendent of power awaited him. They stepped into a soundproof room; the sound receded to a low hum.

"Good evening, sir," the official stated in respectful tones. "I have to report that the mirroroid bearings in No. 43 generator showed such wear that it was necessary to suspend its operation. We can ill spare it." He smiled wryly and glanced out at the other huge glittering machines. "No. 17 over there is also showing a slight vibration of the countershaft, and we are not nearly finished with repairs on 51 and 92. They were never designed to operate with absolutely no aid from the Sun as you well know."

Lotar Kavic clapped his aid on the shoulder in friendly style. "I know, Daton, it is perhaps well that their services will be no longer required in about four hours." He sighed. "It seems odd to know that the long struggle is at an end at last." Glancing at his timepiece, he said, "It is now seven-thirty. Come to my office at eleven, all the high officials of Earth will be there."

Eleven o'clock in the office atop the

huge tower found the ruling officials of the nine cities of Earth gathered about a long table. The minutes dragged by. Finally Lotar Kavic addressed them:

"Gentlemen, we are facing a fate no more dreadful than that which overtook the lizard people of Mercury long ago. We are about to show them that the human race is their equal in courage. I have nothing more to say; you have ten minutes left in which to prepare yourselves." He turned to the window and looked out.

Below, the city was quiet, not a vehicle moved in the streets. Women clung to men and men knelt in silence as the moment paused on the threshold.

Lotar Kavic felt a lump rise in his throat. The end was so absolute, no man could turn from it. The young and the old were equal before it. He held up his timepiece and counted the seconds left.

Eight — seven — six — five — four — three — two — a prolonged roar beat in his ears, flecks danced before his eyes. Pain shot through his body as nerve and muscle seemed to separate. A brilliant flash seared his brain; he slumped to the floor—

Lotar Kavic stirred and tried to open his eyes. His head ached dully and his limbs felt like lead. His eyes twitched from a strong light as he opened them, to small slits and blinked unbelievably.

Through his window were coming parrallel bars of blue-white light. He reeled to the window and slipped to his knees, looking out.

In the east was the Sun—their Sun—shining with a brilliance he had never seen. Already the snowlike atmosphere was rising in heavy mists under its rays. In the street men were stirring, coming out to behold the new glory in the east. Daton, of the heating plant, knelt beside his chief.

"The Sun—rejuvenated," were his words.

LOTAR KAVIC again sat alone at his desk. The Sun, westering in a day that would apparently take only about twenty hours, made patterns on a sheaf of reports before him. The first was from Pluto, reporting the safety of the missing rocket cruisers with the exception of two which had collided during the transition. The second was from Neptune, announcing some calculations on the heat of the reborn Sun. The third was an almost hysterical note from Nenum Kuk, of Venus, telling of the reappearance of clouds for the first time in seventy thousand years.

His gaze wandered to the window; wonderful, this sunlight. Rising, he looked out. Wonderful to bask in its rays. He stood there a minute contentedly. Then the scientist in him gained the upper hand.

The explanation for this phenomena? What had caused this sudden change? Looking out at the fast melting "snow" fields, they seemed to beckon him, to hold forth a message.

His brow furrowed as he watched the rising mists, felt the heat of the blazing Sun. Suddenly he brightened; his step was almost spritely as he hurried over to his control panel and snapped a switch.

"Hello, Norvum? I want you to run an errand for me, to the archives of the observatory."

That night saw the officials of the nine cities again in council. This time it was a gay and cheery number that gathered around the long table. Lotar Kavic addressed them:

"I know with what overwhelming joy you have greeted the return of our Sun. But"—here he paused, a half smile lurking at the corners of his mouth—"I also know how you hunger for the explanation of this miracle. I am confident that I have that explanation here," He picked up a sheet of paper. His listeners leaned forward in their chairs.

"Do you gentlemen recall in your histories of the Earth, the records written thousands of years ago which describe a prehistoric ice age?"

Several nodded their heads.

"I have here a copy of certain calculations made by an ancient astronomer showing the approximate locations of the stars at the close of that period. Will you step to the window a minute?"

He dimmed the lights to better see the heavenly bodies. New stars they were, different stars in new locations.

"These stars, strange to us, were part of the everyday life of the ancients. According to my chart, that blue-white star is Vega, while below it and in the southwest is Antares. That red star in the north is the great dipper and the North Star, Polaris. That is enough to prove my point, I think. Now, the explanation of all this.

"There is, on record in the observatory, an ancient theory, long discarded,

that states the fact that space and time are one. That time as well as space is curved. It is a well established fact that if one travels long enough in space he is bound to arrive at his starting point. This theory stated that so it was with time.

"Gentlemen, we have lived through the proof of that theory. The Sun has, in its long travels, completed its cycle. Time, too, has completed its cycle. We are about to emerge from another ice age. We have seen proof of a very old theory, and the answer to an older question. In my opinion we have never paid enough tribute to the scientists of another day. Let us do so now."

He glanced at his hearers and then again out into the night. Suddenly a brilliant red star flicked into view. Brightly it shone in the constellation of Scorpio.

"Mars has returned to the fold," he said softly.

Statement of the Ownership, Management, etc., required by the Act of Congress of March 3, 1933, of Astounding Stories, published monthly, at New York, N. Y., for October 1, 1935.

State of New York, County of New York (ss.)

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared George C. Smith, Jr., who, having been duly sworn according to law, deposes and says that he is President of the Street & Smith Publications, Inc., publishers of Astounding Stories, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: *Publishers*, Street & Smith Publications, Inc., 79-89 Seventh Avenue, New York, N. Y.; *editor*, F. Orlin Tremaine, 79 Seventh Avenue, New York, N. Y.; *managing editors*, Street & Smith Publications, Inc., 79-89 Seventh Avenue, New York, N. Y.; *business managers*, Street & Smith Publications, Inc., 79-89 Seventh Avenue, New York, N. Y.

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Of Street & Smith Publications, Inc., publishers.

Sworn to and subscribed before me this 30th day of September, 1935. De Witt C. Van Valkenburgh, Notary Public No. 18, New York County. (My commission expires March 30, 1936.)

BLUE MAGIC

The story of power unlimited—of a woman who abused it. The first part of a fascinating science-fiction novel

by Charles Willard Diffin

IN a brush-choked valley beyond Tabletop Mountain lightning ripped down from a black cloud. Smoke rose in a thin ribbon of gray. A half hour later Rance Driggs, trail foreman with the badge of the forestry service pinned to his khaki shirt, rode out upon Tabletop's smooth, glacier-scored rock.

Tabletop was half a mile across; a glacier in some forgotten age must have planed it down to this level, gray floor. Trees growing on the slopes made a scant fringe around it; Black Mountain, close at one side, loomed another mile in air, and Black Mountain was heavy with timber; but on Tabletop the only growth was green lichens here and there and an occasional tuft of grass where the stone was cracked.

Driggs was riding a big roan without any saddle. He came up where the spur trail rises from Black Mountain Trail; he rode past the forestry telephone fastened to a tree and clattered across the barren half mile of stone floor before he slid off his horse.

Across an intervening gulch and beyond two smaller wooded valleys the fire was smoking. But men, grub and tools would come in from below. Driggs made a quick estimate of the start the blaze had gotten, then clapped his hand down on the horse's flank.

"Crowbait," he advised, "you'll find slim pickings up here. Get back there on the slope. I'll be seeing you."

The horse headed back with sound of steel on stone—truly, Tabletop had little forage to offer. Then Driggs turned and swung off down the slope where a firebreak had been slashed like a straight avenue through the woods.

HE CAME BACK over the rim three days later—this time late in the afternoon. He whistled once shrilly, looking across the level rock, then said, "Damn that horse!" but he put no enthusiasm into it. After that he started across the barren expanse on foot.

At the right, from among the trees across the mountain, the big roan abruptly appeared. It stood and looked across at Driggs. The afternoon sun swept the level expanse of Tabletop with its light and made the horse appear twice its size. The horse moved forward, then stopped and lowered its head. It seemed to be eating.

Driggs called out in a tired voice: "Come over here, you old fool; there isn't any feed——" He stopped. Suddenly he was aware that the horse's head was half obscured by green, growing things, and the green was like a carpet spread out toward him.

He said stupidly, "Forage—for a horse—on Tabletop!"

Over all the rocks the lichenous growth had spread. It was like a gray-green wash. Moss, too, was there and added blots of darker green. And in every crack in the rock, where seeds



*The sheen of a pearl was there— Suddenly his
breath stopped—he was looking upon the most
beautiful vision his eyes had ever beheld.*

had blown, was grass, and the grass was almost a foot high. A month's growth of grass— The big roan came trampling through it toward Driggs and pulled a last bunch of the grass as he stopped at Driggs' side. He jerked his head and dirt flew off the roots of the grass and showered Driggs' face.

The horse brought its head down low and rubbed its muzzle against Driggs' shoulder before the man moved. He said slowly, "All right, Crowbait; if you say it's so, it's so. But it's too much for me—and I'm too tired to think anyhow."

He pulled himself up to the horse's back and rode across to the head of the spur trail where the telephone box clung to a tree. He called the ranger.

"All O. K.—over back here. I'm calling from Tabletop . . . Yeah, I had my arm up to the elbow in every ash pocket and couldn't raise a blister.

. . . Now? Why, now I'm going up to my shack on Black Mountain where nothing ever happens, and I hope you don't call me for a week."

RED GLOW of sunset was like flame in the treetops, but below, where Driggs rode, dusk had come. Yet there was light enough when he came to a spring beside the trail to see that the soft earth about the spring was trampled.

The horse drank. Driggs turned half around and rested one hand on the roan's back while he looked off away from the mountain and let his bloodshot eyes find rest in the peaceful gray of evening in the valleys. Beyond the valleys the clustered peaks of the minarets took on violet and rose tints.

He looked down idly at the black muck beside the spring. Deer marks were plain; in one place an impression was like toes of a human foot—tiny hoofs, Driggs supposed, had happened to press like that. He must not forget

to turn in his estimate of the number of deer on the mountain.

The roan raised his head after a bit and blew to clear his nostrils.

For a moment the horse stood staring into the shadowed curtain of leaves beside the trail. Back in the shadows a twig cracked sharply and the horse threw up his head and snorted. Driggs reined him around and kicked him with his heels.

"Get along," he said. "Don't find me any mountain lions to-night; I'm too tired to go get 'em."

Another thousand feet higher the last light of day was lingering in a clearing as Driggs turned off the trail and stopped.

The clearing had been cut from heavy timber and most of the stumps were there. A stake-and-rider corral was at one side. Driggs dropped the bars and turned in the roan. Then he went on across toward a tent that stood in a rough shelter of split logs.

The logs, spiked to uprights, made a wall on either side of the tent, and a corrugated iron roof was above. Here was snow protection that had brought Driggs through one winter; another winter would see a log cabin built if summer fires didn't take too much of his time. But it looked good to him even like this; he walked across toward the tent where one end showed white, and canvas was flapping.

He remembered tying that canvas; still he did not give it serious thought as he followed a path among the stumps. Then he came to the end of the tent.

It was set off the ground on a wooden floor; a cross section from a cedar tree was laid flat for a doorstep. Beside this the earth had been worn powdery and made into deep dust. Driggs, reaching with one hand for the canvas flap, froze and stood staring down at the print of a bare foot in that dust.

It was a man's footprint. The foot

had been set down flat, and the heel and narrowed arch, then all five toes, showed plainly. Driggs raised his head while one hand dropped to the holster at his hip.

He looked around, across the clearing, at the tall wall of standing timber surrounding it, then down toward the corral where the roan was rolling joyously on the ground. Then he looked down at the cross section of red cedar and a pail of water that had stood beside it. The pail was slanted, tipped against the doorstep; water had spilled from it onto the wood. And the water spread and soaked into the wood while Driggs watched. It had only just been spilled.

DRIGGS jerked back the flap of the tent and peered inside. His hand had his .45 half out of its holster; then he let the gun slide back down. He could see every part of the tent's interior: his cot, a box stood on end with a mirror above it and an alarm clock faced toward the cot. The clock had stopped. Beyond this a forestry telephone was fastened to an upright board cleated to the floor. There were other things there, too—all the familiar things that Driggs knew well. But there was nothing else.

He was still peering inside—he had been so sure he would find some one, although he could not imagine any one traveling Black Mountain in bare feet—still staring when a girl's voice from across the clearing said: "You are Rance Driggs, I am sure."

Driggs whirled sharply. A girl's voice, and now a girl was walking toward him. She had just come from among the trees on the side across from the corral. She would be about shoulder-high on Driggs but seemed taller; she was dark, dressed all in brown tones—a soft brown felt hat; a manish shirt of tan silk; brown riding breeches and boots.

Driggs was looking at the boots and the trim smallness of them. "You never did it," he said; then he knew how inane the remark was.

The girl was near; she looked at him and at the tired lines of his blackened face, and she laughed gently. The sound was the kind of sound that could melt into the soft dusk and seem part of the night and all the little night noises. Driggs liked it. And her eyes smiled at him, too.

"You never can tell," she said. "But what is it I didn't do?"

Driggs pointed down at the mark in the dust and made a wordless, snorting sound as he jerked his head. "I'm not always that dumb," he said, "but this thing had me off balance. I didn't really think you could have made a mark that size."

THE GIRL extended one dainty, booted foot. She said, "You're hard to fool, aren't you? Besides, I've got my boots on. Where's the nudist colony? Who runs around like that up here?"

"That's what I've got to find out," Driggs snapped. He looked sharply at the girl.

"I know who you are," he said. "You're Katharine Putnam, Ed Putnam's niece. Ed called you Kitten. He told me you were coming to the lodge. 'Beautiful, and brainy,' Ed said. 'Tender-mouthed as a colt, and as hard to drive.'" Driggs was grinning with cheerful impudence now. "Ed's hard to fool, too," he added.

The girl kept her face impassive except that little crinkly laughing lines gathered about her eyes. "Hard to drive," she agreed, "is right, but I can be led. Now, if you were to try leading me to the trail that takes me back to the lodge—I got lost, and—"

She broke off suddenly. "I see it," she said, "over past the corral. Good night, Mr. Driggs."

Driggs made one move to follow as

she walked away, then stood still and watched her go. At the trail, where the trees began, she looked back. "If you find the feet to match that print," she called, "you might let me know." Then she was gone.

It was an invitation—Driggs knew that. But suddenly he knew that he had forgotten that print or he would never have let her go. He had seen the same mark at the spring—he knew that now—and Black Mountain Trail was no place for this girl.

He called to her as he hurried toward the trail. "Kitten—Miss Putnam—wait a minute."

He was walking fast, following the trail among the stumps. Pale, evening light was blanketing them and preparing the whole clearing for the hurrying shadows already creeping in. Night was coming—of course she must not go down there alone. Driggs abruptly broke into a run and hurled himself toward the trail as the girl's voice came to him in a scream.

"Rance Driggs," she called, "Rance! Come quick, there's something—"

Driggs was jerking at his gun as he ran.

II.

SHE WAS a hundred feet down the trail. The trail was straight here, carved unswervingly as a surveyor's line through a stand of big trees. They walled the path in on either side; it was like looking down through a narrow canyon with the girl at the farther end.

She did not call again, but stood and pointed with one outstretched hand, and Driggs thudded toward her down the trail.

Where she stood the trail had widened, as if one forest wall had been pushed back. Bushes, next the beaten path, grew like a barricade; beyond them the forest was a place of deepen-

ing shadows. The girl's pointing hand was aimed there.

Driggs, saying nothing, drove down toward her. She said, "Wait!" in a tense, quick whisper as if to keep him from danger. Then she must have caught the hard glint in his eyes—perhaps she saw that they were as cold and deadly as the blue metal in his hand—for she said nothing more. Driggs, turning as he ran, cleared the barrier of green in one leap.

He sank as he hit the ground beyond, but came up again, stumbled forward, then steadied himself against the rough trunk of the nearest tree. He stood staring into the gloomy depths, his gun hand pulled back close to his body. The gun swung steadily from right to left, then back, with the turn of his head. In the forest was no sound, and nothing moved; the whole night was still with an unnatural stillness as if every little insect sound had been chilled by fear. Then through the silence, from far off up the slope, came the dull crunch of dead wood under a weight.

Driggs eased his gun down at his side and turned toward the girl. Where she stood in the open the light seemed bright after staring into the black shadows among the trees. Her face, Driggs saw, was pale; and he could see the quick catch and rise of her breast beneath the tan silk. She breathed deeply, once, then managed a little smile.

"That's the first time in my life I ever screamed," she said. "It was pretty good, wasn't it? But really, Mr. Driggs, there was something there."

Driggs said, "Don't let's be formal; I haven't got even a Tuxedo up here. Yeah, that was a good yip, Kitten. Pull those bushes out, will you, and let in some light? I know darned well you saw something. What was it? Did you get a good look?"

"No"—she paused uncertainly—"it was all blurry. But it was something big—bigger than you. It was right

there where you are, so I can tell about its size. But it seemed——"

Again she paused. Driggs waited.

"Don't hold out on me," he said, after a time. "Let's have it all."

"There isn't any more—not anything definite. But I had the queerest feeling—that it was all blotchy. I looked right at it, for I sensed something there, and I didn't see a thing; then it was just as if a whole block of green leaves and shadows moved. But it wasn't leaves; it was something——"

"Pull those bushes toward you," Driggs suggested. "This light won't last long." He dropped to his knees as she obeyed.

Light came down faintly upon the leaf mold; the black earth was wet with water from a spring higher up, and Driggs' knees sank into it. He felt the cold wet of it and started to get up, then pushed down closer to the ground instead and stared in the fading light at two marks in the black earth.

Footmarks—big enough for a man, if ever a man's foot had ended in two broad, splayed toes. Or if anything human ever walked on such a foot with a third toe jutting out at right angles. The third toe had curled down and sunk deeply into the ground. There were two of the marks.

Driggs did not move. The water, seeping from the ground, gathered about his knees in two pools and soaked into the corduroy. Above him the girl let the branches swish back. "Well?" she asked.

"Too dark," Driggs said evenly; "all I can see is a couple of dents where I hit." He got slowly to his feet and pushed out through the bushes. "Come on up," he invited; "you can wait in the drawing-room while I get cleaned up. Then the roan will take you down-trail and I'll just sorta tag along in case."

"That's pretty nice of you—Rance. But you are so tired."

"You'd be surprised how much of that washes off." Driggs smiled down at her as carelessly as if he had never seen three-toed marks hooked deep into the clean leaf mold of Black Mountain's side. But any one watching would have noticed that his hand rested lightly on the gun at his hip as he led the way back toward his tent with its housing of logs.

A HALF HOUR LATER Driggs had emerged from in back of the grime. He had taken time to shave after stepping under an icy shower of spring water piped in back of the tent, and his lean, bronzed face had lost its tired lines. He had got into clean clothes and even wore a new sombrero crushed carelessly on his head. Katharine Putnam looked at him with frank appraisal. "I think I like you better this way—without your disguise," she announced.

"Tell me some more," he encouraged. "you've started on my favorite subject." He was watching her closely in spite of his light talk. She showed no signs of nervousness—and he decided she wasn't the kind to get jittery. But he kept up the bantering talk while they started down the trail.

She did not ride but chose to walk along with Driggs while the big roan, with reins looped over the pommel of the saddle, followed along behind. An early moon, approaching its roundest girth, beamed mellowly down where the trail lay open on the mountainside or left the wooded portions plunged in darker blackness by comparison.

They passed the spring. When the horse back of them, stopped to reach his head down toward the water Driggs said, "Time out," and went back and made pretense of loosening the reins. He looked down sharply at the black muck about the spring.

Moonlight set droplets to sparkling like scattered jewels. The light also made a black shadow of each impress

in the muck. The mark Driggs had seen before was plain—it was the print of a human foot. He looked for other marks, incredible distortions like a three-toed foot, but saw only familiar animal signs. He slapped the roan resoundingly on the flank and walked back down where the girl stood waiting.

They passed the Y where the spur trail to Tabletop turned off; they went down and still down until glint of water made silvery reflections below them among the trees, and they knew they were near the lake and Ed Putnam's lodge. In that lower section of trail at a point where it lay open to the sky and a jutting promontory of raw rock gave a view of all the valley below with the distant misty peaks, Katharine Putnam stopped and stood for long minutes gazing out into the calm night.

Driggs brought her reverie to an end with a few words. "This isn't my mountain," he said, "but sometimes I feel as if it were, and I've got a fancy for killing my own snakes. I'll ask you not to tell your uncle about any of this. Is that O. K.?"

"O. K.," she said, but she did not look around; her eyes were still turned toward the misty depths and the distant, unreal peaks, when Driggs heard her breath catch sharply. "Look!" she said, and Driggs' eyes turned with hers.

Out of a clear sky a star was falling—a blue star; a single, untwinkling light. It swept in one curve, almost too swift for watching eyes to follow; the curve flattened and became a line of light aimed toward Black Mountain. Then the line ended in a sharp punctuation point of light as the star hung motionless for one single instant. And in the same instant it took up its side-wise flight and was again only a thin line that curved back of Black Mountain's towering bulk.

IT WAS GONE, and for a moment neither Driggs nor the girl moved.

Sound like faint thunder came to them, throbbed in their ears and set the air softly atremble. But it held on too steady a note for true thunder. Then abruptly that, too, was gone.

The girl breathed. She said soberly, "Friend Rance, you've got some strange snakes to kill. Do you still want to tackle them alone; and have you any idea what all this means?"

Driggs shook his head. He said, "Not the slightest idea. And, yes, I'll keep this a private fight until I find it's more than a one-man job. But I'm open to suggestions."

Her answer came slowly, "I'm going to take you up on that, Rance," but for a little time she said nothing more. Then she turned and faced him squarely. The moonlight touched her face and made it even more lovely. Her eyes looked gravely into his.

"You know your stuff or you wouldn't be holding your job—besides Uncle Ed has talked to me about that. And that's point one.

"You're a gentleman—though please don't ask what that means, for I don't know. Breeding, background, various qualities not easily put into words. But that's point two.

"And," she went on quickly, "that's all I know about you and I am wondering if you are qualified for this thing—I mean this snake-killing job. It sounds pretty silly, I know, and a woman's intuition is just a joke, but call this a hunch. I've got a hunch that being a forestry man and a pretty decent sort isn't quite enough.

"I wish you had—oh, I hardly know what I mean; I just feel so strongly that this thing—"

She left it unfinished. Driggs nodded. He wasn't smiling at her mention of intuition; he was thinking of the incredible footprint he had seen and she had not. But she had glimpsed something else. And now she was trying vainly to put into words a sense of im-

pending danger too obscure for words. He said: "A brief autobiography by R. V. Driggs—

"When I saw the depression putting better men than I am into C.C.C. camps I took forestry for mine. But I took a B. S. first. Does that matter?"

He was looking at her curiously, his eyebrows raised the slightest degree. A little flickering, satisfied smile crossed his face as she said: "Not to me, but it may to the snakes. Perhaps we had better go down to the lodge now."

AN HOUR LATER Driggs, astride the roan, was headed uptrail. He sat the horse easily and his hand rested carelessly on the pommel of the saddle. At times he smiled; again he glanced sharply to right and left where the woods pressed close and shadows were black. But at the spring he settled definitely into one mood as his grimly set lips showed.

He rode on, pressing the horse up the last grade, then he stripped leather from the animal and turned it into the corral.

Across the clearing the tent end showed ghostly white. The clearing itself was a moon-filled pool and the flat stump tops were round islands, each above a shadow of dense black. Driggs waded through the pool toward the tent.

Inside he struck a match and reached for the gasoline lantern. His one hand touched it, then held there; his other clung to the match until he flung the match to the floor with a jerk of pain. For the one glance, although it showed him he was alone, showed also that another had been there.

The lantern, when he got it lighted, left no doubt. On Driggs' cot, in an orderly row, was a curious miscellany of articles: his rifle with the bolt drawn, a government heliograph, two glass tops for the coffee percolator, an old boot, and the alarm clock.

There was more besides; it was somehow remindful of the solemn antics of an ape. And Driggs, glancing about, knew that a hundred other things had been disturbed, although he could not have told just how they had been moved. Then he saw his grub box open against the wall.

Two strides took him beside it, and he looked down while the scowl on his face smoothed out to other lines. Half-eaten vegetables were there, carrots and turnips, even raw potatoes; and teeth marks were on all of them.

Beneath his breath he said softly, "The poor three-toed beast was hungry. But what the devil is it?"

He looked about again wonderingly, and this time saw the other end of the tent. The canvas had been ripped apart.

Some one, or something, had left in a hurry. But out beyond that end was wet ground all around the shower. Driggs took down the lantern, felt of his gun, then lifted the canvas where he had come in and circled the tent.

Marks were there. Five-toed marks that puckered Driggs' lips into a soundless whistle. "Five-toes," not "Three-toes," had been there. Five-toes was the hungry one. Then Driggs' searching eyes found other marks.

Five-toes had left fast; only his toes had touched, and the ball of each foot, and they had hit hard on the soft earth. But coming in from the right were deeper marks—three-toed marks. They aimed toward Five-toes' trail; turned and paralleled it; then fell in behind and in places the deeper three-pronged dents in the ground had fallen over the more human prints and obliterated them.

A man—Five-toes—had run in frantic terror from some three-toed thing—and Katharine Putnam had seen that beastly pursuer, though only dimly. She had seen only something blotchy, something so nearly one with leaves and woodland shadows as to be invisible

until it moved and vanished, something that had left its grotesque footprints in the earth.

But there was nothing in the world to make a mark like that! Rance Driggs was telling himself that over and over in his mind when he again stood in his tent. He cleared the cot and took his gun and a flashlight and put them on a box beside the cot. Then he lay down.

Softly the night air came in at the open end of the tent. It was heavy with fragrance: pine and cedar and the good odors of damp earth. How could such mysteries be in so wholesome a world? Driggs knew suddenly that the night air was trembling.

It was almost soundless—like the deepest note of some giant organ that beats upon the whole body rather than the ear alone. It lasted a moment, then was gone.

III.

BLAZING SUNLIGHT in the morning helped—coffee helped, too. After that Driggs called the lodge over the forestry line. He did not mean to speak abruptly, but this thing was troubling him. He didn't like mysteries, but he didn't like those prints out there in the soft ground, either. He said:

"Listen, Kitten; you wait down there for me. I'm coming down."

Her voice had been warm at sound of his first words; now it chilled. "What a many-sided character you are! But I can't say that I fancy the cave-man rôle."

Driggs protested: "There are sixteen parties on this line; I can't explain. But get this: I was the one who held out; I didn't tell you all I knew——"

"Of course not; I've only known you a day, and that would take—oh, years and years I'm sure." He heard her laugh then. "Incline an ear, Sir For-ester," she told him.

"I've had my breakfast. I'm all full of vitamins and mountain air. The sun is shining—I can see it from here—and there's a gorgeous day outside. A big blue jay out there is telling me about it. And in about thirty seconds the blue jay and I are going to take a walk up Black Mountain Trail. If you happen to be coming down this way we may meet you."

Driggs heard the phone click, then he slammed his own receiver on the hook. He couldn't tell her over the phone, that was sure. He strode quickly out to the corral and lifted saddle and bridle from the corral fence. After that he swung the roan toward the trail and pressed it to a stiff, jolting trot down the long grade.

He was not expecting trouble at the spring; his thoughts, as a matter of fact, were reaching on ahead. But he came to himself abruptly when the roan snorted and reared back. The spring was directly ahead. Beyond it the trail bent sharply around a bulging outcrop of gray rock. The trail was empty.

Morning air, beginning to move, touched his face lightly; it came down the hill and bore a strange scent, an odd, pungent odor. Driggs got that much warning before a scream echoed from the trail ahead.

He thought first of Kitten, but this was a man's voice in a strange, wordless cry—a terrified sound. The roan backed again and threw its head around as if to bolt. Driggs reined the animal back, then sent it down the trail in a clattering rush of slipping hoofs and scattered stones. His gun was out as he pulled the roan around the bend at the rock, then reined back at sight of a naked man with bronzed, but blood-stained skin.

For a hundred feet the trail was, only a ledge. Rock rose up sheer at its back and the man standing on the ledge was like a statue against the gray rock. It

was all like a picture, where nothing was real, hence nothing moved.

The man's face was turned away; he was looking down at the trail. But his whole posture was one of horror; his body was bent back, and his head pulled back farther still until his brown hair, which was like a mane, hung straight down without touching his shoulders. The hair was snarled and full of leaves as if the man had slept in the woods; his body from shoulders to feet was crisscrossed with scratches half blotted out beneath smears of dried blood.

DRIGGS got it in one flashing glance; he saw the man's feet that were like other human feet. Here was Five-toes. Then Driggs saw the coils of a rattler on the trail ahead and knew the cause of the man's rigid terror.

It was then that Driggs' gun roared and fire spat in a single, straight line. After that, on the trail ahead, gray, diamond-marked coils writhed and looped silently, whipped a mangled head and fell at last into a cluster of dried fern.

Driggs threw himself from his horse. "You poor nut!" he blazed. "What's the big idea——"

The man turned his head. His eyes were deep and soft, almost liquid-brown; gentle eyes, yet there was strength in the face. He swallowed, and the muscles of the face worked; then he opened his lips.

"*Aar tanya*," he said pleadingly and pointed to one bloodstained, thorn-ripped leg. "*Aar tanya, holyay*." He was indicating two blue-black marks and two others just below—fang marks—where the rattler had struck.

Driggs jammed his gun into its holster. "No savvy," he said curtly; then he took the man in his two hands and forced him to the trail. "Lie down; I'm going to get rough," he told him, and dropped to his knees at the man's side.

His knife was sharp and he slashed at the flesh twice, then cut it crosswise. He whipped a handkerchief around above the cuts and knotted it and twisted it with a stick. After that he bent down and put his lips to the cuts and felt the salty taste of blood in his mouth.

He sucked the poison and spat it out—sucked and spat it out. He was keeping the tourniquet tight with one hand, and he was trying to remember if there were any cuts on his lips or mouth. He was wholly engrossed with the work at hand, and he never knew what made him jerk his head back suddenly and look above. But he looked.

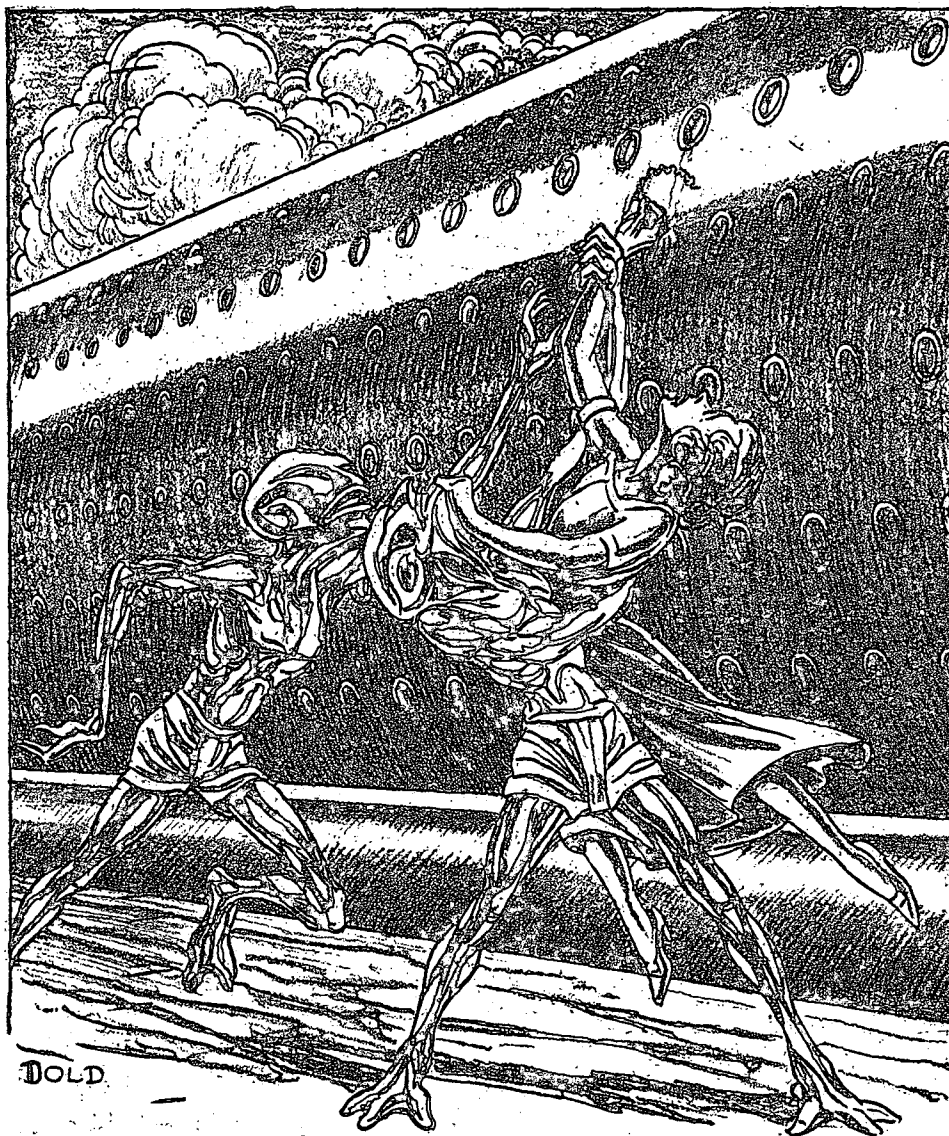
The rock was sheer for twenty feet. It ended then in a draping of leaves like a ruffle of green. Driggs had time only to sense other shades of green that were out of place—shiny, cellophanelike green. He got one faint scent of the pungency he had smelled before, and he saw a face, or something like a distorted caricature of a face. It merged with the green of leaves and seemed to have caught their color; a scar on one cheek of the face made a white line.

Driggs saw the face indistinctly and knew that it was horrible, then he caught the glint of sunlight on metal. The metal was white, with a luster neither of silver nor gold. But it was a weapon, and Driggs made the beginning of a move toward his own gun; and, at that, light, utterly blinding, blotted out all else.

It came where the metal had been; it burst into one unendurable effulgence; it flashed down and felt with little searching fingers of pain inside Driggs' skull—upon his bare brain! Then those piercing pains merged, all in one endless instant of time, into a single, overwhelming blow.

The instant ended in darkness that swept him up and away.

COLD struck and spread out on Driggs' face. Blurred sound was in his



The shape had wrapped his long arms about Kitten, and one held. Driggs came out of his daze, went

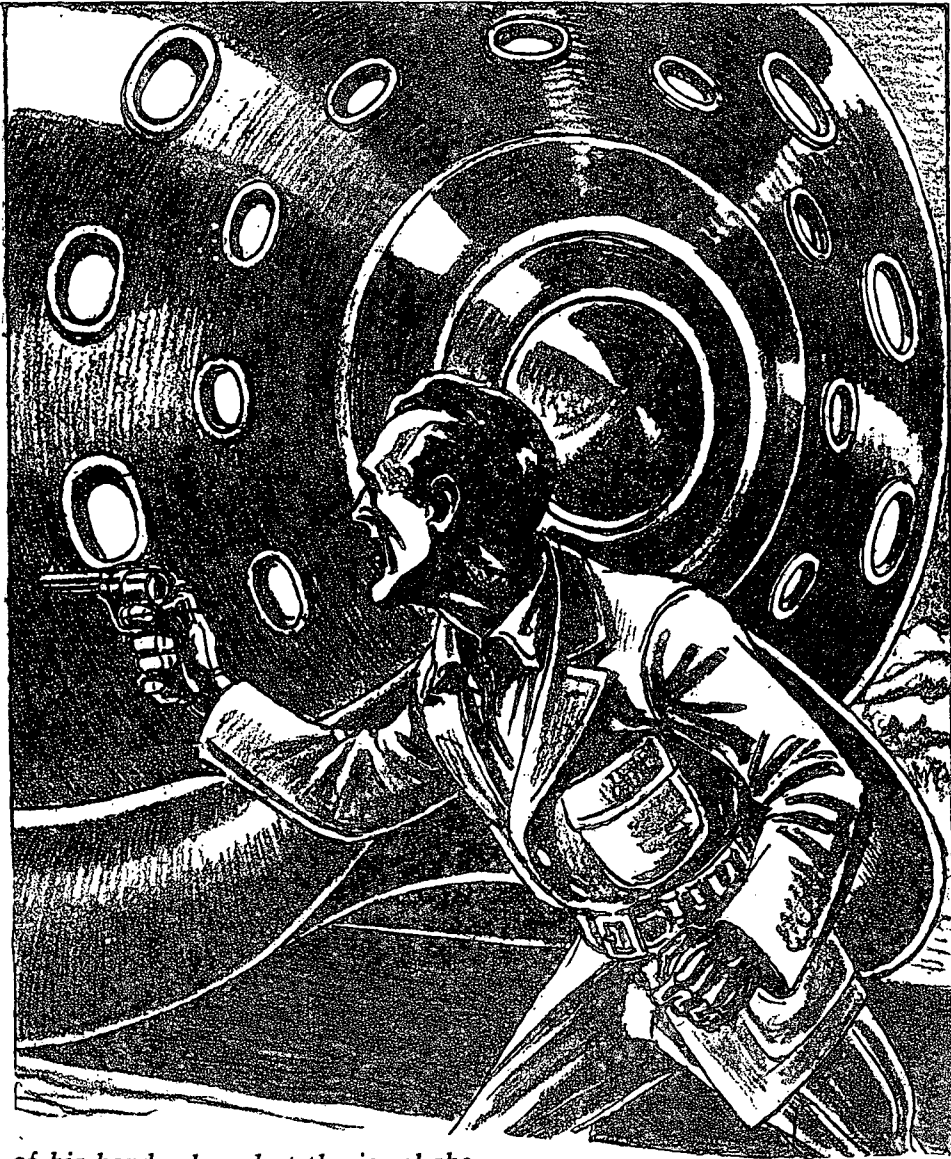
ears. Again the cold covered his face and ran down inside the collar of his shirt and made lines of cold on his neck.

It was water. And the sound was a voice—Katharine Putnam's voice. "Rance," she called, "Rance Driggs! Wake up!"

He sat up suddenly and opened his

eyes. The girl was kneeling on the trail beside him. Ten feet away a white bulldog stood, stiffly braced, staring about and growling. It was Ed Putnam's dog.

Driggs said thickly, "My gun! Quick! There's something up there —" Then he reached out blindly with both hands and clung to the girl's shoul-



*of his hands clawed at the jewel she
for his gun—*

ders while the whole world seemed spiraling down upon him. His head fell weakly against her breast.

After a time he said, "I can stand now," and lifted his head, but for a moment he sat quietly on the rocky ledge. Sunlight touched him. An hour must have passed since he had ridden down the trail.

The girl was watching him closely. She said, "Your horse threw you—was that it? You'll be all right now."

Driggs looked down at the rock where a naked man with gentle eyes and a bronzed, brier-scratched skin had been. Spots of purplish blood where Driggs had spit out the poison were nearly dried. The bulldog came nearer and

sniffed at the rock and rolled his lips back from his teeth. Driggs said in a dull tone: "Sure, the roan threw me—but you shouldn't have come up here, Kitten. I told you——"

She broke in with quick words, and her voice sounded tight and strained when——

"Why don't you come clean? Oh, I know you are trying not to alarm me—you've wanted to look out for me—but your horse didn't throw you. I've been to the spring. I've seen the marks. What does it mean? What can it mean?"

Her hands were gripping at his shoulders now. She even shook him a little. "We're in this together," she said.

"Give me a lift, Kitten——" Driggs got slowly to his feet. After he got his balance he walked to the spring and looked down. The black muck was pitted in a dozen places with deep, three-toed prints. Water stood in some of the pits.

"All right," he said, "I'll tell you everything I know——"

Neither looked at the other while he talked. He put his few facts very briefly. And after he was through he looked away across the wooded valley, while the silence of the mountain drew almost tangibly about them. The dog came up and sniffed at the prints in the mud, and his sniffing was the only sound.

"Get back!" the girl said sharply. "Leave them alone; they're horrible!"

Without looking up she spoke to Driggs. "This is no one-man job—you must see that now. You said you'd get help."

"Sure"—Driggs was still looking off into space—"sure; that's right. But I'm not telling any one yet. You see——"

He paused as if searching carefully for words. The girl glanced up at him once; then looked down again at the spring. Driggs spoke jerkily:

"They couldn't get onto Black Moun-

tain from over back"—he motioned with one hand up the trail—"and the lodge—that's like a bottle neck—they couldn't have come there; not with Ed and the dog. And so——"

But he did not finish. And after a moment the girl said, "The blue star. I've known all along that was part of it. I just knew."

SHE was still looking down at the spring and the black earth beside it and the water oozing into deep marks.

"A man," she said very quietly, "who doesn't belong here; and a three-toed thing like nothing on this earth; a blue light moving faster than anything we've ever seen; and a weapon that knocks you cold. Add that up, Rance. What does it mean?"

Driggs flung out his hands in a quick gesture. "And there's more, too," he said harshly. "Grass, growing on Tabletop, grass in a big oval the shape of—but I'm not that crazy—yet!"

Katharine Putnam seemed not to hear. She was bending down, looking at the black muck and at one imprint a little separate from the rest. Water, just now reaching it, was seeping in; the water even formed a little rivulet and trickled into the print. And, where the rivulet ran through a spot of sunlight, were bright, sparkling flashes.

She reached down and touched the water, and when she straightened a mud-coated cube and a piece of broken chain dangled from her hand. The cube was about an inch across.

She bent once more and washed the cube and chain in the clean water of the spring, then pulled them out again. Gems set in the cube filled her cupped hand with rainbow tints.

Kitten said, "I imagine that this may prove us both quite sane."

Driggs looked at the trinket, turned it over and over. Each face of the cube was intricately carved, and each was studded with gems let into the metal

below the surface. The metal was blue-green and was not like any metal Driggs had ever seen.

On one face was a single stone that flashed diamond colorings. He touched this, and instantly the cube was an open box in his hand.

It was lined with soft cloth of woven, gleaming gold, but the cloth was only a setting for something more radiant—a sphere of pure blue that lay like a pearl on the gold cloth.

The sheen of a pearl was there, too. But the color— Kitten uttered one little cry in the presence of beauty that drove every thought from the mind.

"Lovely!" she breathed. "How utterly, fascinatingly lovely!"

She was seeing it from the side. Driggs was not. He was bent above it, looking down upon it. Then, abruptly, he was looking into it, and it was no longer a gem but a deep, blue pool, where, far in the depths, tongues of red and yellow flame unceasingly played.

They blocked his sight for an instant; then he seemed bursting through them, and with that his breath stopped as if a hand had clamped down on his throat. For abruptly he was looking upon the most beautiful vision his eyes had ever beheld.

"Lovely! Utterly, fascinatingly lovely!" Kitten's words were still echoing in his mind. But Kitten had seen only a jewel, while Driggs was looking upon a woman more beautiful than any jewel.

She was half reclining on a metal divan, and there came to Driggs quick conviction that the divan was on a raised platform, and the platform was in a great room where many moved. monstrous things—but he could not see them for looking at this girl.

One arm was crooked upon the divan's jeweled end, and her head rested on her hand. A silken scarf that lay in soft folds was her only covering. It

was of heavy stuff, but no curve of her young body was unrevealed. And her face, the slender beauty of her legs, her throat were uncovered, and all were creamy-white with such delicate overlay of pink as the inner petal of a flower might have shown.

Her hair was sheer gold, spun fine, hanging softly back on her shoulders. A single jewel was clasped to her forehead in an encircling band. It was like a blue star. It was matched by the blue of a little sphere in a metal box in her hand.

She was looking away with languid unconcern, her beautiful oval face untouched by a single line. Her eyes were half hidden under long lashes.

Driggs, unbreathing, heedless of passing time, saw this vision and could think of nothing more. He was still breathless as those languidly lovely eyes turned downward and looked into the blue sphere—and as they did this he was suddenly face to face with the girl, looking into her eyes and finding them violet pools.

He saw them open wide with surprise; then swiftly, shockingly, they changed to something so ferocious, so hideously, vindictively murderous that his whole body flinched in involuntary recoil.

IV.

THE LIPS, so softly sensuous a moment before, were drawn into a hard line. They moved with tight, quick motions, and although Driggs did not hear her, he knew somehow what she said:

"A stranger—with the jewel of Dra Vonga! Where is my messenger, Arkos?" Her hot rage was flaming out at him.

She waited; then instantly came a transformation to the alluring vision she had been before. Her lips smiled, and again they were full lips, but beautifully molded. Once more her eyes were deep

pools of violet where dark lashes were a screen, and her smile was inviting as she spoke soundlessly.

Again Driggs caught the thought. He even heard her little throaty laugh.

"Dra Vonga," she said, "is not displeased. The stranger will be welcome; he will come when I call. Whoever holds the blue jewel of Dra Vonga must come when Dra Vonga calls."

She was all feminine allure and beauty then; her smile caressed him. Until one hand came up and there was the beginning of a motion that ended in a slashing downstroke, and the stroke seemed to cut the space between them. She was gone instantly.

Again Driggs was standing on Black Mountain Trail. He had a blue jewel in his hand and he was looking into it as if it were a pool, but there was only flickering red and yellow flames in the depths of the pool.

From up the trail came sound, the nickering of a horse. The white bulldog walked slowly up the grade.

Katharine Putnam was still at Driggs' side. "You look so queer," she said. She pulled down on his hand and leaned above the blue sphere and looked down into it as he had done.

"I'm sorry I kept it so long," Driggs stammered. "I—I couldn't help it."

She looked up at him. "You're talking rather silly, Rance. You just looked at it for a second; that was all."

Driggs thought that over. "A second," he said, "just like that! And the grass on Tabletop got a month's growth in how long? Minutes, maybe. Kitten, can you answer this? What is magic?"

Her eyes were troubled. She looked at him, then sent a relieved glance up the trail as steel rang on stone and the big roan edged around the rock projecting into the path. "If you will get on the horse," she said gently, "I will go with you. Your cabin is nearest. Perhaps if you lie down——"

Driggs stood still. "Then I'll answer it," he said.

"Back in physics lab we cooked without heat and saw without light; we took pictures in the dark and looked through six inches of steel. And we all send our voices around the world and flash pictures by radio. But that isn't magic. And that gives us the answer: magic is something we don't understand."

"Blue magic—television—thought transference! And time means just nothing at all! Come on; we'll go back to my shack; I want to put this blue gadget out of sight. It's dynamite and T. N. T. and a lot of other things but none of them good."

THE SHELTER on each side of Driggs' tent was made of half logs. Driggs, after he had seen to the horse, walked to the end of one wall and put his hand on one log with a battered end where a sledge had splintered it. He took hold of one long splinter and lifted it as if it were a flat spring. Underneath was a cavity where pine beetles had worked.

He pulled the little box with its ends of chain from his pocket and crammed them all into the hole in the wood. Then he let the flat splinter snap back.

Kitten said, "There mustn't anything happen to that, Rance."

"That's my safe-deposit box," Driggs said. "There won't anything happen to it."

He turned to Katharine Putnam then and stood for a moment looking at her. He even walked up close before her and took her chin firmly in one hand and raised her face until she was looking directly at him. "You've got honest eyes," he told her; but gave no explanation of the words.

He strode inside the tent and the sound of his voice came out as he phoned the ranger and arranged for the day off. When he returned he carried a gun belt with a pistol swinging

in the holster. He fastened it around her.

"I'll walk down past the Tabletop spur with you," he said, "and I guess you'll be safe for the rest of the way with this gun and the dog. We've got to have a show-down on this thing. I'm not too easy to scare, but it's got me looking over my shoulder."

He explained his plan on the way down—and below Tabletop Trail he waved a last good-by and struck off down the hillside over an emergency fire trail that took him into a deep valley. There were other ridges beyond and plenty of impassable terrain that must be detoured. But beyond all were the minarets.

The minarets were grouped like gaunt, gray fingers pointing to the sky; they commanded a view of Black Mountain and Tabletop and a hundred miles on either side. They were to be Rance Driggs' lookout post.

He did not head directly for them, but swung off to the north after a time. Five miles away men from a government camp were slashing out firebreak, and the ranger had asked him to have a look. But, somehow, all the forestry work seemed inconsequential now.

He spent two hours or more with them, then went on. Evening found him pulling himself up the barren, wind-swept slopes of the minarets. He stopped on a high ledge, breathing hard, and stood for a time watching as night swept in and took possession of the world.

It was all spread out before him. Black Mountain, just over there across a dark gulf, loomed hugely and seemed near at hand. A zigzag line, blocked off here and there by trees, was the trail. He could not see his clearing at the upper end of the trail, but halfway down the spur to Tabletop was plain. And Tabletop, just beyond, thrust itself out flatly, seemingly from Black

Mountain's side; it was an island of smooth rock, shining in a dark sea under the first pale stars.

DRIGGS turned away from it and gathered fragments of stone from the ledge. He laid them up to make a little projecting wall at the back of the ledge and settled himself in the lee of it. A windbreak, even as full of holes as this, helped when the wind was cold from hidden snows. Driggs turned up the collar of his jacket and hunched himself over, but he kept his eyes on Black Mountain and Tabletop.

He was up against something over there, something he wasn't quite ready to put into words as yet. But it was something pretty damned real. Pretty soon, now, he and a few others who could hit what they shot at would see what some .45 slugs could do. Or perhaps some high-powered ammunition in the magazines of rifles, and the rifles in the right hands.

But he wanted to get a better line on it all first. He had been too close to it to see clearly. Besides, he had an idea he wanted confirmed.

He settled down lower beside the little wall of rocks and took the end of a loaf of bread from his pocket and a roll of pressed meat. After that the wind didn't seem so cold.

The eastern horizon had vanished in darkness; now it was taking on light. Distant ranges were like tiny cardboard cut-outs against a golden sky. Then a flattened sector of gold appeared above them and grew until the full moon lifted free. In its flooding light Black Mountain's pines made rough saw teeth along the slope, and Tabletop gleamed more like water than rock.

But the beauty was wasted on Driggs, who was staring toward the west. Back there, in the sky out of which the wind was coming, stars had been blotted out one by one behind a vague indistinctness. Now the moonlight, pouring

across, illuminated storm clouds along a billowing front.

Lightning made a quick penciling of light between earth and clouds, and after a time thunder boomed and rolled among the peaks. The clouds were riding an upper wind and were coming fast; they were over Black Mountain when the first drops of rain made tapping sounds on the ledge where Driggs sat. A big drop splashed icily on his cheek.

He got up and stretched. His legs were aching, and he swore softly under his breath; then abruptly he was listening to something like the faintest echo of thunder.

But this vibration held on one note; somewhere among those gaunt crags a mighty organ was sounding its deepest bass. Then a point of light like a blue star fell straight down from the clouds, curved to one side so swiftly that the line of light was like a bent, gleaming wire, then hung still for an instant of time.

Other shimmering light was about it, metallic twinklings half seen; then the blue light shot swiftly to one side on a flat trajectory.

Again the line bent, but this time it ended at Black Mountain. It passed behind the mountain, then the line of blue came again from the opposite slope and arched sharply down to Tabletop.

For an instant it gleamed there, then winked out. And, from a high ledge on the minaret, Driggs watched, and gripped unconsciously with one hand on the rock wall while he leaned forward and strained his eyes across the gulf.

He said huskily, "I knew it! I knew they were using——" Then his voice died, and he stood even tenser, staring at the place where Tabletop had been.

For Tabletop was gone.

Moonlight still poured in to illumine it; not yet had the advancing storm screened it off, although cloud masses were rolling around Black Mountain's

sides. But Tabletop was gone, and where it had been was only a nothingness; something indescribable; a maze of writhing, twisting lines like the quivering of hot, desert air.

Rain struck in a solid wall on the minarets. It poured heavily against Driggs' outthrust face. It drove through his clothing in that first blow, yet he never felt it. He only raised one hand and wiped the water from his eyes and from his forehead above them.

He held his hand against his forehead as a shield for his eyes, and he stood in silent, breathless staring at the quivering, emptiness of Tabletop—at something which was neither light nor substance nor motion, yet seemed blended of all three.

Nothingness, vibrant! Then the gray cloud masses tore loose from Black Mountain, swept on where Tabletop had been, and, with that, even that mystic emptiness was gone.

Driggs sucked in one long breath. He gagged as water drew into his nose and mouth. Then he felt of the holster flap above the butt of his gun and pulled a flashlight from his pocket and tried it.

No light came; the flashlight dripped rain. He stuck it back in his pocket, and dropped flat on the ledge. At the point where he had climbed up he let himself over the edge into the night.

V.

FIGHTING through darkness and driving storm, Driggs found one consolation in the night. Something was on Tabletop; something which, if he could only see it, might clear up all mysteries. And it might be that this storm would serve to hold that something there until another day.

He had this thought to cheer him even when he had lost all landmarks and was stumbling blindly on through smothering cloud.

He came up Black Mountain after

daybreak, climbing north of where he had planned. He hit the trail well above the Tabletop spur, and he stood for a little time, swaying with weariness in the middle of Black Mountain Trail, while he forced his mind to decision.

His rifle—sure, that was it: he must pick up his rifle. It was up at the shack. There was brandy up there too, half a bottle in the medicine kit. Brandy wouldn't go so bad right now, either. Swinging upgrade, he headed for his tent.

He passed the roan without a word, walking heavily across the clearing. The ground among the stumps was spongy with water, and little pools mirrored the morning sky. Driggs plowed through them and on to the tent. He stopped with his hand on the flap at the sound of a growl; then tore the canvas aside and looked in.

Ed Putnam's big bulldog was tied to his cot. The dog looked at Driggs, then his tail made thumping sounds on the floor. Driggs dropped the canvas and moved to the end of the log shelter in two strides.

Certainty of what this meant made the pit of his stomach heavy; he was even a little nauseated, and he swallowed hard twice before he reached for the long splinter of wood that was like a flat spring. He did not need to look to know that the metal box was gone. But he looked and saw paper fluttering and reached for it with a trembling hand.

The words had been scrawled with a blunt pencil; they stared up at him in a meaningless blur at first—

Rance:

I have taken it. I came back; it is too beautiful to risk. Leaving dog for company should you return in night.

Katharine.

He read it through again before he could get it clear, for his mind was confused. Then he let the paper flutter

to the ground as he sprang for the tent, tore at the canvas and leaped inside. His fingers found the ringing crank of the forestry phone. The lodge was on this line, and he rang a long, short and long, then repeated it with agonizing, trembling care.

A voice came at last—Ed Putnam's voice. He laughed at Driggs.

"You're a fast worker, Rance"—his nasal drawl stopped, and he laughed again with a cackling sound—"no, Kitten isn't here. She went out a while back, went off up the trail. But how come you're giving her jewelry like that? And what in time is it, anyhow?"

Driggs' throat was almost too dry to talk. He said raspingly: "She went up the trail— She went— How long ago, Ed? For Lord's sake, how long ago?"

"Maybe a half hour—maybe less. But don't worry, Rance; you've made a hit with that little blue bubble. She was looking at it so hard she wouldn't answer me when she went out. She went off up the trail just looking at it as if——"

THE RECEIVER dropped from Driggs' hand and clattered against the board that held the phone. It swung and went back and bumped against the board again twice while Driggs stood there looking blankly into the phone.

The dog looked up at him and whined. Then Driggs took one stumbling step toward the end of the tent, caught himself, and suddenly leaped into action and ripped the canvas aside.

"Who holds the blue jewel of Dra Vonga"—the voice was maddening inside his head—"must come when Dra Vonga calls." He remembered the quick hatred of Dra Vonga's eyes. She was a devil, whoever she was—a beautiful, soft devil! Now Dra Vonga had called. And Kitten had answered.

He did not touch the dog nor make

a move to untie him before leaving the tent. He did not even pick up his rifle because of its extra weight. Time! Kitten had left a half hour ago—only time counted!

He passed the corral at full speed, for a running man can outdistance a horse on downhill work. He turned where the trail began; and then, when nothing else could have stopped him, chance came to check his mad flight.

Beside the path water gleamed, and the rain-filled pool lay where Driggs must turn. Beyond was a clump of alders. At the first splashing step into the pool Driggs' foot slid. It caught again, but he was off balance; he flung his arms wildly then pitched ahead and sideways, and his body crashed headlong into the thicket of green.

He lay for one instant, half stunned. He did not move, and the alders closed above him and hid him from the clearing and the path. And in that instant sound came.

A rumbling was above the trees; the noise was like thunder, but this droned on one note. Air throbbed in Driggs' ears, and he struggled to get to his feet; then, abruptly, everything vanished in a nebulous haze. A quivering of lines wove about him; the alders were gone; he could not see his own upraised hand. He stiffened in momentary breathless waiting; then through the silence came a single ripping, unidentifiable crash.

This nebulous nothingness was like the thing he had seen on Tabletop. Driggs realized this, and, realizing it, knew that the quivering was gone. Alders inclosed him again, and his hand was level with his eyes, reaching for a grip on a swaying branch.

All about him was silence—until from the corral came a horse's scream of fear and sound of galloping hoofs.

Driggs got to his feet. His hand went to his gun and jerked it free. Then he sprang out into the path be-

side the pool. He landed facing the clearing, looking across it, and for a moment he did not move, but stood and looked—and looked—

At a litter of half logs that had been scattered like straw; at white fluttering rags and ribbons of canvas among the debris; and at fragments of metal and wood and cloth that were like carpet over it all; part of his clock, the broken leg of his stove, bits of a government heliograph and plane table and telescope; clothing, boots, the bent barrel of his rifle; every object in the tent had been individually shattered or torn to bits.

Ten feet from where Driggs stood was a mound of white. Only at second glance could Driggs know this was Ed Putnam's big dog. The body lay on its side; the head was twisted back and the throat was cut until the vertebrae of the neck showed white. Blood was running in a hot stream, as if the killing were not yet done. The dog's lips were drawn back in a snarl like a grotesque grin.

Here was death, and fury, and savagery beyond imagining. It had all followed a search for the jewel, of course. And it had come in only a second of time; all this had been done behind a veil of invisibility. And the wet earth in the clearing had been trampled by three-toed feet as if a herd of strange beasts had been milling about.

Driggs turned. He paid no attention to marks of three-toed feet on the path, but threw his body forward and drove his feet against the ground in a desperate effort for speed. Time! It was a matter of time.

For the things that had done this were on Tabletop—this he knew with a sure knowledge beyond any doubt. And Kitten was going there, going helplessly into something too fearful for imagination to depict. Abruptly, in that instant, Rance Driggs knew that what befell this girl was important beyond

all else. If anything happened to Kitten——

He drove his straining, aching muscles harder still. His feet made quick thudding on the rain-soaked trail.

VI.

AT THE Y where the trails branched he pitched headlong to the ground when he tried to turn. His legs were wooden things that had lost all feeling and had held him up only by some miracle of reflex action. But they held him when he got again to his feet and moved at a staggering run up the Tabletop grade.

The trail was only a thin line beaten into the pine-littered ground, and it wound among trees here for the first hundred feet. But the cushion of pine needles took no marks.

Driggs slogged heavily up the grade. When he came to brown earth he dropped to his knees. And there, kneeling on the ground, he held still for a matter of seconds except that his muscles twitched and jerked spasmodically. In the dirt a mark showed plainly, such a mark as Kitten's trim boots might have made.

He was unbearably heavy, yet somehow he got to his feet. Strength was gone, but somewhere he found will power to take its place, and he went on and up. And at last he ran drunkenly, waveringly out upon the smooth rock of Tabletop's glaciated expanse.

Smooth rock save for occasional hollows. And grooves marked it—straight, parallel lines scored by glacial drift. The marks ran straight away from where Driggs stood. They converged as they drew away; they seemed so many strings pulling at his eyes, drawing them in just one direction, toward a figure all in gay red and white, a girl with auburn hair blowing gently in the wind.

She was wearing a simple frock of some red material, very sheer, and sprinkled with white dots; it made her seem, somehow, like a little girl. She was walking slowly, her head bent, her eyes held by something in her hand. She moved with the unreal smoothness of a figure in a dream. And she was walking directly into a quivering wall such as Driggs had seen before.

Trembling lines like desert air, nothingness, always in motion; he saw and called out once as the first nebulous quivering closed about her.

"Kitten," he said hoarsely, and for a moment was strangling. "Wait, Kitten——"

The red-and-white figure faded, became gray, dimmed to a ghostly transparency, then was gone. And Driggs again was running after, driving his nerveless leg muscles to take him staggering forward toward that whirl of invisibility.

Sharp sensation tore through him when he struck it; a tingling filled him, hot as fire. He could see nothing. Even the rock beneath him was gone; his body faded out halfway down. He ran, but he seemed running on air.

That hot tingling grew stronger, yet was not heat; it was vibration, a drumming in every cell of his body as if every atom was speeding into faster motion. Faster—faster——

He had been blind since he first entered the zone; now, suddenly, as if he had burst through the invisible wall, he saw! And there ahead of him was Kitten, still moving, still going forward like one in a trance. She was walking toward a great, metallic, cylindrical mass, and abruptly Driggs could see nothing else.

It loomed hugely beyond her; it was slanting away, and the nearer end showed in blunt roundness. It rested on the level rock, and the bottom of the thing was swelled out to make two longitudinal protuberances like runners.

It was of gray metal, and rows of port holes pierced it; a great door was drawn inward in the lower curve of the metal, and a gangplank of the same gray metal slanted down.

It was a giant ship—an airship; and inside it was glowing light, and the light shone upon a horde of monstrous green creatures that poured out from the open doorway and spewed across the ground.

THEY WERE green with the transparent clearness of cellophane, and with the luster of cellophane, too. Mottled green, like no living thing, but still they were alive, and they were men of a sort. They swarmed out like grotesque caricatures of human kind and crowded together into a milling mob.

Their heads were elongated and green and some eight feet from the ground; their bodies were naked and hideously, transparently green, for now it was plain that it was not their skins that were green, but that green inner flesh, green muscles, green arteries and veins and nerves, were visible through the transparent skin. They looked as if they had been flayed.

Wrappings of bright colors were about their hips, but their legs and feet were bare and the feet were hideously misformed things with three toes.

They ran, and sounds came from their wide mouths—cries, hoarse screaming sounds. And it seemed to Driggs then that they were vermin—a nightmare swarm from some fevered dream! His head jerked back, and he squeezed his eyes tightly shut, then opened them again, but the swarm persisted.

One running ahead of the rest was close to Kitten. Another instant and he had wrapped his long arms about

her and swung her off her feet with the fury of his rush, while one of his hands clawed at the jewel she held.

Another shape was close behind it. This one's face was scarred; the scar was a whitish-green slash diagonally across one cheek. He reached out and tore the first one's hand aside and snatched the jewel from Kitten's stiff hand. The first green man-thing still clung to the girl.

Driggs came out of a daze. This had come too fast; it had stunned him, but now he went for his gun.

He was utterly exhausted, drunk with fatigue. His muscles were jerking erratically, and he could scarcely feel the touch of metal against his hands; but by some miracle he raised the gun, leveled it and held it steady.

Green figures, a dozen of them, were rushing toward him. Their mouths were open, and their voices made a tumult of strange cries. But they were not yet between him and the girl. He could see the green naked thing that held her.

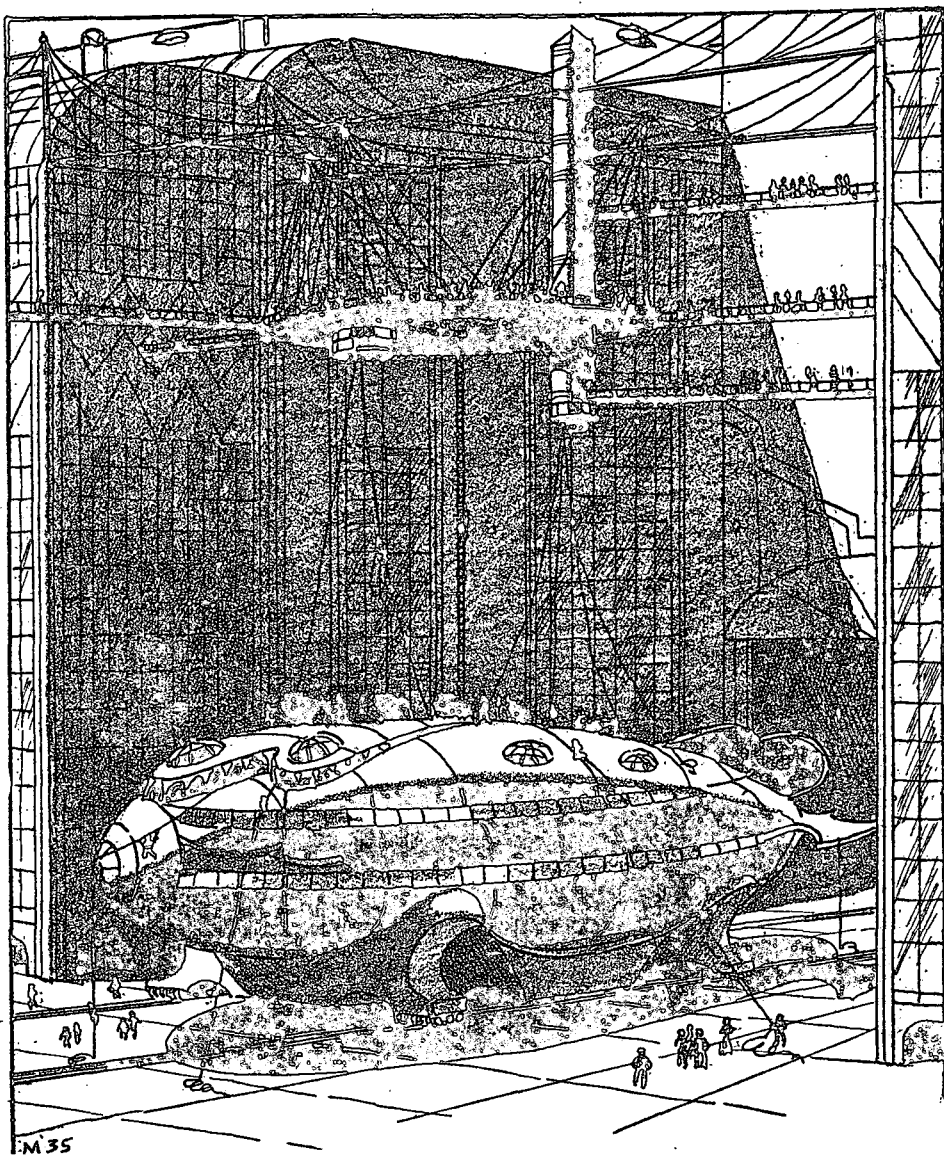
He would never have dared shoot so close to her in his right mind. But he squeezed the gun, and the sound of the shot rang in his ears above the screaming uproar of the mob. The green figure swayed and flung out its arms, then slumped slowly to the ground.

The rest of the screaming pack was close. Driggs, whirling, sent his next shot into them. He saw gleam of white metal in their hands and squeezed the gun a second time. Once more—then light came as it had come back on Black Mountain Trail, blinding light—and pain.

He was seeing the huge, rounded bulk of the ship as he fell—

*Diffin's thrilling serial builds to a breathless climax as we follow
through into Part Two next month.*

AST-6



The Lichen from Eros

by Frank Belknap Long, Jr.

ALFRED GALTON was proud, and young, and happy. As he walked along the gleaming, horizontal windways his eyes glowed, his steps were buoyant. Beside him moved a hurrying throng of pressmen,

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scientists, artists, privileged young students and graybeards with the insignia of dignitaries on their yellow leather, swagger jackets.

The spaceways snaked above the weathered bulks of the older space

ships; and when young Galton looked downward he saw the mottled, ether-seared tail of the lunar cruiser, *Ohio*, the old, once-swift *Europa* which had encircled Mars, and the Venus rocket, *California*, lying bright and still in the early morning sunlight.

The immense berths beneath him were full. All of the old valiant veteran ships were in and mechanics swarmed upon them. Metallic ladders crisscrossed on the rounded and eroded surfaces that had dared the cold night of space; grease-grimed little figures gestured from a hundred perilous vantage points far below. Every one was looking or moving swiftly westward along the spaceways, converging in streams upon the cable-suspended landing disk above the bright, new glory from the skies.

The white space giant, the *Top* of Memphis, had returned from Eros. The great sun shone upon it; Earth dew glistened on its screwed-down hatches and an aura of mystery and wonder enveloped it in the morning light.

The disk was crowded when young Galton joined his elders and a sprinkling of students on its burnished surface. His heelless, deerskin shoes carried him silently over the smooth metal to the side of Edgar Blaine, middle-aged botanist from the Smithsonian. Blaine's spare frame was vibrant with excitement, and his lean, hawk features were set in a molding of enthusiasm. He turned and nodded at Galton, then smiled broadly as his gaze swept the heavy, motion-picture outfit which the youth was toting.

"Lo, Alfred," he said. "That camera must weigh a ton. Why don't you use a kodak like McNeil and Hellman? Hellman wears his on his wrist."

Galton grinned. "Don't you think this merits a big camera, sir?" he countered. "There are certain effects I can't get, you know, with a pygmy. Hellman blows his salary on nymphs and air-

planes, but I prefer to improve my equipment. You've got to, in these times. The company is darned unsentimental. If we don't produce exceptional reels out we go on our ears."

The botanist nodded. "Your work is good, Alfred—scientifically accurate, worth viewing."

"Thanks," said Galton. "I owe it all to Winters, you know. He taught me to seek perfection. He used to say that very few people do their best, in work or play. When they do, their efforts command attention."

The young man gazed abstractly for an instant at the hushed, excited throng. Many of the world's great were there, maneuvering without-dignity for positions of vantage on the disk. They were preparing to acclaim William Winters, leader of the initial expedition to the Earth's nearest neighbor, and commander of the *Top* of Memphis.

Far below in the streamlined, white body of the giant space ship were fifty-four scientists who had trod alien, wondrous soil. They were all elderly men, weighed down with erudition and distinctions, graybeards too serious to jest. When the hatches were lifted they would emerge and receive the acclaim of their peers on the disk. Botanists would greet botanists; zoologists, geologists and physicists would trade weighty comments, only their glowing, pale scientist's eyes revealing emotion in countenances rigid with an artificial glumness.

Galton knew the tribe, loved them, approved of them. All his life he had admired the scientific temperament above all else. These grave men were very human underneath and heirs of the Vikings of old. Not thoughtless men of action merely and not nebulous dreamers. They had stout hearts, and eight-cylinder brains functioned behind their pale brows. Intellectual curiosity dominated their lives, and beneath their somewhat worn and overgrave exteriors

the fires of passion burned at white heat.

But young Galton knew that he did not altogether belong—at least, not yet. He was too young, and much too externally exuberant—hard-boiled, too, and a bit flippant and cynical. Down there were real people, men tried in the crucibles of experience.

Galton knew that Winters would be glad to see him. Despite the acclaim of the graybeards on the disk—their leathern jerkins made them look a trifle less grave—the famed commander of the *Top* of Memphis would greet his protégé first. Amidst all that fanfare of dignity and distinction Galton would not be forgotten.

WINTERS was young Galton's cousin. Galton had lost both his parents when a very young lad and Winters had taken care of him. He had fostered his love of natural history through eight winters of fireside discussions over cups of black coffee and between puffs of a stout briar, and by summer excursions far afield. Fostered his love of photography too. When Galton was really eager and competent he had secured him a position with the International Film & Sound Record Supply, Inc., biological division. Galton's nature pictures had been exhibited before tens of thousands of student scientists in America and England and his fame as a craftsman was growing by leaps and bounds. But none of his past assignments could compare with this one.

The Supply had given him a stiff, extensive assignment, and he gloried in it. First he would film the opening of the octangular hatches and the emergence of the weather-bitten crew, then Winters and his famed associates. He would cover that for the news division, an assignment that should have fallen to McNeil or Hellman.

The directors admired competence, diligence, technical proficiency. Hell-

man was losing caste while he, Galton, was gaining it. After the news record was safe on its spool within his camera he would film, or at least request permission to film, the specimens. Strange, unearthly flora and fauna, spawned on the tiniest of asteroids. The thought thrilled him and he became so keenly eager that he could scarcely contain himself.

"I know how you feel," said the botanist sympathetically. "When I was your age, two and twenty, I used to turn somersaults over mere Earth-grown orchids, rare ones, of course. What wouldn't I have given for a glimpse of Venusian fauna in those days. Now I've handled fungi from the lunar craters, corrosive puff balls from Pluto, and red-slipper lilies, *bling* plants and flame-tongued ice flowers from Venus. But they don't really thrill me. When I was a young man, back in 1935 or 1940, we used to have a slang expression for it—'kick.' They don't give me a kick now."

Suddenly he gripped the young photographer's arm. "Look, there are the mechanics. It won't take them long to unscrew the hatches."

The landing disk was suspended by massive cables one hundred feet above the *Top* of Memphis. A rectangular opening, perhaps forty feet by fifteen, had been cut from the center of the platform. Against the waist-high rail which encircled this aperture at least eighty men and women peered eagerly downward at shining whiteness veiled in morning mists. Sunlight pierced the veil and mottled the great ship here and there.

The *Top* of Memphis rested between massive, vertical supports of black, pressure-indurated glass. Navigated with superlative competence, the white space vessel had returned unerringly to its berth from the cold night of interplanetary space. It rested at a slightly oblique angle, its flattened nose sloping

toward a wide expanse of gravelly soil and its tail projecting eighty feet behind the outer edge of the disk above. The ship was two hundred feet from nose to stern.

Over its entire length mechanics swarmed. Two tiers of ladders, looking like spider-web traceries to the observers on the disk, dangled from its middle segments and single ropes slung indiscriminately across the nose and tail, tested the mettle and equilibrium of the little forms that were clambering like monkeys from the ground to the hatches and across the top where the glow was brightest. Hammers and anvils clattered on the shining metal; and shouted directions drifted upward, whipped by a faint breeze.

"Would you think me very ignorant," said the botanist, "if I confessed that the mechanics of this marvel have completely eluded me. As a practical physicist I'm a complete flop."

Galton smiled, wrinkled his brow. "Flop, sir?"

"Forgive me," said Blaine, "more old slang. I live too much in the past—sentimental weakness of mine."

"A nice old boy," thought Galton, "modest and candid." Aloud he said: "I don't wonder you have difficulty in understanding the propulsive principles of the *Top*. All of the old space ships, as you know, achieved momentum by the timed explosion of rocket charges. But the *Top* figuratively sails under its own steam. It took me a couple of weeks to figure it out. I'm a much worse physicist than you, sir."

THE HAMMERS were clattering below. Pabst, the foremost academician of the German Free State, was fuming with impatience. His leathern jerkin strained about his massive torso as he pressed closely against the rail. His wife, a buxom frau with rosy cheeks, stood teetering on her toes beside him. The botanist grinned, said: "It will be

a couple of minutes before they get the hatches open. Could you give me a thumb-nail explanation? I'm really interested."

"I'll do my best," said Galton. "It's a complex device, but in some respects perhaps more primitive than the explosive packets used in the older ships. The principle was worked out experimentally nearly a quarter century ago, by a Professor Rouss of the University of Virginia.

"Rouss ran rotors in blasts of compressed air, and achieved a centrifugal force a million times as strong as gravity. Startling, wasn't it, for 1935? But not so startling when you take into consideration the size of the rotors.

"The rotors and the stators, or shafts attached to them, were incredibly tiny, so that the tremendous air pressure naturally worked miracles. The rotors made nearly 8000 revolutions per second, thus traveling at a speed of fifteen miles a minute. A bullet fired from a high-powered automatic would perhaps travel half as fast for a couple of seconds.

"That's speed, of course, but useless for interplanetary travel. A man would be a graybeard, traveling from planet to planet at that rate. Also, experiments with higher speeds caused the metal of the revolving rotors to fly apart. Few metals can tolerate a very swift propulsion."

"Serious obstacles," said the botanist.

"Yes, very," said Galton. "It was not until two years ago, in the spring of 1962, that 'itintat' was invented. That metal will tolerate fifty thousand revolutions a second. And you know what we've done with compressed air."

He nodded downward at the white wonder in the mist. "In the stern of the *Top* is a centrifuge so potent that it would move a mountain. Not one, but millions of proportionately tiny rotors attached to shafts, millions of tiny tops generate sufficient energy to

send the Memphis giant around the solar disk or out into black chasms of interstellar space."

The hatches of the white wonder were swinging open. The men and women on the disk ceased to breathe as the massive octangular flaps of metal were drawn upward by the perspiring mechanics a hundred feet below. Galton clutched the rail till his knuckles whitened, and the botanist strained forward.

Jet-black octangular vents now loomed beneath the upraised hatches. The mechanics gathered in a little cluster in the center of the shining summit, jabbering and gesturing excitedly.

From the rectangular aperture in the disk at thin metal ladder was slowly descending. It was operated by a space-way mechanic from a little rotunda perched amidst the vast meshes of cable and aerial promenades that spread fan-wise in all directions both above and below the landing disk. The ladder was jointed and flexible, and was fed out from a groove at the base of the rail by electric current.

Galton's camera rested on the rail, with lens focused on the upraised, central hatch of the great ship. It made a purring noise as it functioned, winding yards of precious infra-red negatives on the automatic spools within.

Winters emerged suddenly. He leaped out of the dark central hatch. His tall, spare frame was clothed in a yellow rubber lounge suit. He was wearing dark spectacles. His beard was untrimmed, his hair frowsy. The trousers of the lounge suit were tucked negligently in shiny black boots. A pipe dangled from his large mouth. He heaved his gaunt person to the top of the upraised hatch and sat there without dignity, twisting his head about.

RELIEF and affection flooded Galton's being. "Look at him," he exclaimed, clutching the botanist's arm.

"The old boy doesn't care about his dignity. You'd think he was a kid home from a lark."

Men were now emerging from all the hatches. Two little Chinamen helped a gigantic Negro out of the stern hatch and five husky white men, all members of the crew, followed the ebony giant into the sunlight. Two elderly scientists and a woman in a green smock emerged an instant later. They stared upward at the thronged disk, shading their eyes, distorting their features.

Presently Galton recognized three or four of the emerging explorers. Talmann, the entomologist, and Allen, of the geological survey, leaped briskly into view. The immensely tall, extremely eccentric Fred Andrews, athlete and adventurer, joined Winters on the hatch.

The descending ladder now swung a few feet above Winters' tousled head. The leader of the *Top* expedition looked up, grimaced, and began an animated conversation with his companion. He seemed excited, and waved his hands about.

It was all going on the infra-red film in Galton's camera; and it made the young man uneasy. Winters would look like a jabbering idiot to millions in the news theaters if he wasn't careful. The stuff would also be teletereographed about the world, sent to the mining outposts on Venus and Pluto. Why couldn't Winters be careful?

"He doesn't care a damn about the reception," said the botanist. "He's chewing the fat. See him now. You'd think he was in his study at home. A schoolboy, you say? Eh, an infant." But there was a ring of admiration in the botanist's voice.

If Galton was apprehensive before, he was overwhelmed with shame when Winters started to ascend. He climbed up the ladder as far as the fifteenth rung, then suddenly seemed to remember something and returned to the sum-

mit of the space ship. He talked an instant with Andrews, waving his hands about even more wildly, and then surged up the ladder again. On the tenth rung he stopped, started to descend and then changed his mind, climbing swiftly to the top.

As he clambered over the rail he was greeted with a burst of applause. Galton shivered, knowing how that would sound on the film. The graybeards were applauding him, not his antics on the ladder, but it wouldn't sound that way on the screen. What followed was even worse. Winters was nearly mobbed. His colleagues forgot all restraint, all decency. Wild with admiration, they pulled and tugged at him and lifted him into the air.

Galton swung the camera about, captured it all. Then he clicked off the switch with a groan and backed swiftly from the rail as the crowd surged down upon him.

Winters spotted him from the shoulders of a well-known biologist. His dark eyes flashed suddenly in a gaunt face, a gaunter face than Galton had known. The weeks on Eros had aged and changed him, tragically, terribly. Galton was alarmed.

"Hey, Al!" shouted Winters. "It's great to see you. Get me out of this, will you?"

Galton met the appeal with grim dispatch. He shouldered his way between the famed ones, pushing, shoving. An astrophysicist cursed, a zoologist groaned; a Royal Society medal caught on the youth's sleeve, was ripped from a broad chest. But Galton rescued Winters.

"That was a sticky mess," said Winters, as they raced along the spaceways toward security and freedom. "I've got to get away from them or I'll crack up. I've been under a frightful strain, Al."

Galton increased his pace. He was breathless but prouder than ever. Win-

ters was fleeing from the best minds in America and Europe, preferring the company of a young tyro, a hard-boiled young whippersnapper. Hell, maybe the young fellow Alfred Galton had something in his head after all. Otherwise Winters would have stuck it out on the disk.

THEY reached a subterminal of the Manhattan Gyroscopic Railway on the high, shining spaceways, slipped swiftly into the swinging seats of a car that was getting ready to pull out, and relaxed. The melon-shaped vehicle purred, then vibrated loudly, and swung with dramatic suddenness out into space.

On a gleaming, single rail, so tenuous as to be almost invisible, the car sped over the golden waters of the North River, swung in a long arc downward over the triple-leveled streets of lower Manhattan and entered the wide, dark mouth of the central terminal with a loud droning of its twin gyroscopes.

Fifteen minutes later Galton and his cousin were sipping tea in a tiny, self-service restaurant in midtown, third-level New York. Winters was drawing designs with a pencil on the margins of a calorie menu at his elbow. His eyes were shadowed, his features grim. Words poured swiftly from him as he drew circles, triangles and funny little pigs with twisted tails. Galton hung on his speech, fascinated, wonder-struck.

"On all that dark, alien little world there was no life," said Winters, "no visible life. Fierce winds raged over a landscape that looked like something mixed in the crucible of a medieval alchemist. When we emerged from the Top and gazed downward we were nearly blinded by the glare of mountains and valleys and river-beds, destitute of vegetation, that wound in all directions like a nest of serpents.

"The mountains were jagged, hung

with crags. They usurped the far horizon, shining with reflected radiance, with a glow as of burnished metal. They were blue-black, forming an ominous backdrop to a world of inanimate shapes that glowed. Everything glowed, everything—glowed with a luster ten times as bright as the plains of Mars, or the lunar mountains.”

“And that seemed ominous,” said Galton, with furrowed brow.

“Yes, very. I can’t define it precisely, but the sensation seemed one of—seduction. The brightness dazzled us so that it made us fearful, afraid, and yet we were fascinated by it.

“It was a twisted, tumbled, malformed, and unutterably grotesque world. The ground sloped at crazy angles. There were deep depressions in the gleaming soil, hillocks with serrated edges; river-beds that wound fantastically across miles of blue-black plains, and low plateaus that rose like brave mounds from an all-engulfing sea of brightness.

“Somehow the smallness of that refulgent sphere of alien and brilliantly glowing matter was not reassuring. We felt lost in space, perilously adrift on a fleck of matter. Though we could see the Earth as a bright star in the sky and the moon as a smaller orb, the sense of alienage weighed horribly upon us. Not even during the long journey through the cold interplanetary gulfs had we experienced such dismal forebodings.

“And yet we were not on an uncharted mystery, on a planet or asteroid invisible in the telescopes of Earth and only known by its movements. For many years now we have known the main facts about Eros. Thirty years ago we discovered that it was not one planet but two, and that its twin orbits occupy a periphery in the skies of perhaps seventy-five or a hundred miles. Each little asteroid is perhaps six miles

in diameter. When it is night on one it is day on the other and they revolve about each other in five hours, sixteen minutes.

“We also know that this arrangement is unique in the solar system. Throughout the vast abysses of the galactic structure there are numerous double stars and perhaps double planets revolving about them, but Eros is the only twin in our system.

“These tiny spheres are the Earth’s nearest neighbor, but their mass is so negligible that they hardly deserve to be called sister planets. They are not even little brothers or cousins of the terrestrial globe. They are just—well, just pin-points or flecks of matter hovering between the Earth and the nearest planet.

“We have computed their density and mass. We know that the mass of Earth is nearly two hundred million times as great, but that Eros’ density exceeds the density of our globe.

“ALL THIS we verified. We discovered nothing amiss in the observations and speculations of the astronomers. But I am getting ahead of my story. We crawled out of the hatches and descended to the glowing blue-black soil of Eros the first. Above us in the sky Eros the second shone with the reflected radiance of the great sun. It was night on our half of Eros the first; but it was a white night of dazzling splendor. Eros the second illumined its twin with a blinding glare.

“I was the first to descend. Behind me came Andrews, followed by Ruth Brent and Fletcher, the geologist. We descended hand over hand on the embossed metal ladder which, as you know, runs from the central hatch to the base of the *Top*.

“I was relieved when my boots sank into the bright soil and I discovered that I could breathe with ease. There

was sufficient oxygen in the air of our little gadfly to sustain the great bipedal hulks of Earth. We had drawn in samples of the air through a filter valve and tested it before emerging; but it was a relief to test it again by drawing it into one's lungs and discovering that it was in all respects as fresh and invigorating as the air of Earth.

"All the way down the ladder I kept close to the ship, almost hugging the metal, but when I reached the ground I swung completely about, relinquished my hold on the last rung and took a step forward.

"It was the longest step I shall ever take. It carried me high into the air, over gleaming waterways and grave-shaped plateaus to the summit of a glowing, crag-hung mountain. My feet skimmed the gleaming soil, then scraped violently and finally slipped into a groove of steel-bright metal that tore and dragged at my ankles and held them in a grip of iron. I cried out, toppled over backward.

"For an instant I lay on my back staring up at the bright sunlighted face of Eros the second, and far off in another part of the sky the Earth watched me as I stared. I was wonderstruck, terribly shaken and startled. I twisted my head about, saw Earth, and knew that it was not a crazy dream. I choked, cursed my stupidity in slow monosyllables.

"I weighed perhaps a few ounces. I should have known what the enfeebled gravitational force would do, should have realized that on Eros as well as on all the little planets and asteroids scattered between Mars and Jupiter and out beyond the rings of Saturn a man would bounce about like a feather if he wasn't careful. I hadn't been careful. I had taken a bold, energetic step forward and the momentum had carried me perhaps two miles—perhaps five.

"Slowly I set up, wrenched my ankles

from the wedge of metal. The effort carried me into the air again. I came down on another peak, having glimpsed in flight a valley between two mountains and a long, dry river-bed like a banner unfurled.

"I won't weary you with further details of my flight around Eros. It was really a flight, though I flew without wings and the take-offs were sudden and unpremeditated. I simply stirred and the little gadfly world moved beneath me. I saw a red dawn and knew that I was approaching the day side of the asteroid. Into the bright realm I soared and landed on a hillock that shone.

"In the glare of the solar disk I rested for an instant, then moved again. Presently the night side came sweeping back; or rather, I flew toward it. Two more swift space journeys beneath the glow of Eros the second brought the *Top* into view.

"I had covered eighteen or twenty miles in as many minutes. But now arose a problem that taxed my ingenuity to the limit. It was easy enough to fly from mountain peak to mountain peak, but getting from a high peak down into the plain where the ship lay wasn't easy at all.

"I experimented first with slight muscular flexings, gentle movements of my body in repose and soon discovered that I could lift myself and actually progress a few feet by such means. I made little short flights, coming down in the most grotesque postures imaginable.

"I WAS impatient to get back to the *Top* and soon decided to increase the tempo and extent of my movements. I stood upright and even ventured to move forward a few inches. Instantly I flew out over the *Top* and landed on glowing soil three or four hundred feet to the east of the ship. I moved again, and sailed back over the *Top* to the base of the mountain.

"But, gradually I modified my movements until they carried me within hailing distance of the ship, and eventually to the foot of the ladder. I seized the lowermost rung and ascended swiftly. I was so damned glad to get back to old Memphis that I didn't think of anything else for a couple of seconds. I was breathless and bruised and my nerves were shrieking. Then I recalled with a sudden pang of anxiety that Ruth and Freddie had followed me out, and were probably flying about somewhere on the night side of Eros. Perhaps calamity would overtake them.

"And poor old Fletcher, the oldest member of our party, was out too. He was eighty-two, and would bruise easily. I was sick with concern when I clambered over the top of the ladder and pressed the centrifuge which opened the hatch. Funny how easy the hatches opened on Eros. No mechanics had to do a riveting job of it. Despite the metal expansion brought about by exposure to the unearthly cold of interplanetary space the hatches worked smoothly. A single centrifuge could swing them.

"I climbed down the sky ladder inside, ran along corridor V56 and smashed right into poor old Fletcher. His eyes goggled.

"'Didn't know that was you!' he gasped. 'I heard the hatch opening but I thought it was Ruth.'

"I gripped his bony wrist till he winced. 'She's still out then,' I exclaimed. 'I was afraid something like this would happen. I warned her to stay inside, do you hear? I warned her. It's your fault she's in peril. You told her to go, urged her.'

"Fletcher was patient with me. I guess he knew how I felt about Ruth.

"'She followed you,' he said. 'She saw you shoot off, and was worried. I really tried to hold her back, did my best.'

"'And Freddie?' I demanded.

"'He went after Ruth.' He cleared his throat apologetically. 'I tried to hold him, too. Don't see why the whole expedition has to go floating around Eros just because one of us forgets he weighs a half pound.'

"I looked at him, hard. I was still a little angry. 'Forgetting had nothing to do with it,' I said. 'How was I to know that just stepping out briskly would send me shooting off like that?'

"'Ruth will be all right, my boy,' he said.

"I didn't share his confidence. 'I should have known better than to let her descend,' I said. 'There's nothing out there would interest her anyway. She's only interested in vegetable epiphytes—in lichens—and there's no life on Eros.'

"I didn't know then how wrong I was. I didn't know that Ruth was to be stricken by something that looked exactly like a lichen—a thing of bright wonder, and a thing of horror. I was determined to encircle Eros again in search of her. I even started up the ladder when I heard the hatch above me slowly opening.

"A chill wind blew upon me. Some one was coming down the sky ladder laboriously, as though burdened with more than weariness. I retreated to the corridor and waited. Presently the man on the ladder groaned, swore softly, and his feet sounded on the metal floor of the corridor.

"Old Fletcher gasped. 'It's Ruth—Ruth and Freddie. Good heavens, she's fainted.'

"FREDDIE came staggering toward me along the corridor. His face was ashen. I leaped toward him and relieved him of his burden. 'I won't tell you how I felt when I looked into Ruth's face. I felt entirely responsible, for one thing—guilty as a legion of

devils. But I won't try to describe my other emotions. They stripped my mind of pretense as the cold of outer space strips atoms.

"I knew that she was my whole life, just about everything. Without her I was just a bum, third-rate biologist. I never felt sorrier that I hadn't asked her to marry me before the Memphis business turned me into a blind, impersonal machine. You see, I thought she was dead.

"Her face was very white, but she opened her eyes after a minute and looked up at me. 'Hello,' she said. 'I saw you flying off, and was worried, had to follow. I leaped into a hornet's nest, I'm afraid.'

"Her face contracted in sudden pain, she moaned. 'My back,' she said.

"Old Fletcher helped me carry her to the hospital unit. We put her on a table and saw what the lichen had done to her back. The flesh was bared in spots almost to the bone; and the lichen was still clinging to the edge of the wound. I had to be cruel in order to be kind. She cried out when I tore it off, then smiled at me through moist lashes. I nodded reassuringly, then bent and kissed her forehead.

"'It's nothing serious,' I said. 'I'll pour on some Dakin's solution and by to-morrow you'll be feeling frisky. We'll celebrate out in space.'

Winters emptied his cup of tea, nodded grimly at Galton. "I thought it was a lichen," he said. "It looked like a lichen—dry and brown, with little brittle knobs all over it."

Suddenly he pushed his chair back from the table and his hand went into the upper, right-hand pocket of his rubber lounge suit. He drew forth a square, metal box about ten inches in diameter. In utter silence Winters laid the box on the table, snapped open the lid and moved it toward his companion.

Galton stared in silent curiosity.

There was nothing even slightly startling about the specimen which nestled on a yellow slide in the box. It did look precisely like one of the common varieties of terrestrial rock lichens. Just a plain, brown, dried-out vegetable scab, or scurf, three or four inches long.

"It is harmless now," said Winters suddenly. "The people are dead; and there is no life in all that strange, tragic little city. The armaments are standing idle. They are stranger than anything else in the city, those armaments. Tiny blast guns, heat ejectors that spit flaming death at 300 degrees centigrade.

"I tested the heat by isolating them under a microscope and checking it on a bolometer—amazing. The tall buildings are wedge-shaped, stupendous. They are built according to some alien geometry; I cannot fathom it. I toppled a few with my thumb. Half the city is in ruins because I was a careless fool and crushed the lichen violently between my thumb and forefinger when I tore it from Ruth's back. I saw what I had done when I put it under a microscope."

GALTON was staring at his companion in sudden alarm.

"I am quite sane," said Winters with a grim, pathetic little smile. "I know it sounds incredible, but—it's true. If you'll reflect a moment, you'll see that it's all quite logical. But, of course, I'll show you how it looks under a microscope, you can see for yourself. I say it's logical because, don't you see, a city on Eros, on a tiny gadfly of a planet in the sky, could not be much larger than a man. And that would be an enormous city, for Eros.

"This is just a normal-sized Erosian city—what one would expect. The people are microscopic, naturally. We would be microscopic to the inhabitants of a world millions of times the size of the Earth.

"There were thousands of living people in the city when I tore it from Ruth's back. It was dangerous then. The blast guns singed my palm even when I held it at the tip of long tweezers and when I put it under the microscope the terrific heat of the ejectors dissolved the lens instantly. But that was ten days ago, out in space. The city is a charnel now; all its inhabitants have died of starvation.

"I could not save them. I tried, but could not. Five days ago I put the lichen on the slide of the microscope and there was no explosion of armaments. It was then that I discovered its real nature, saw the marvelous buildings, the people in the streets.

"Half the population were dead or dying, and the rest had abandoned hope. They no longer fought to save their little world, to repel an unfathomable invader. They set about in grim dejection and despair. I broke off the tops of a few buildings, looked inside, isolated a few little figures on a separate slide and studied them. Hundreds died while I watched the city, in the space of a few minutes.

"I never learned their source of nourishment. I tried spraying the city with vegetable and animal nutriments, fine powders. But apparently they subsisted on some alien substance drawn from the metallic soil of Eros."

Suddenly a spasm of grief and pain convulsed Winters' features and he lowered his eyes. "There was one that I tried desperately to save," he said.

Tears appeared suddenly in the corners of his eyes, glistened on his weather-bronzed features. Young Galton stared, hardly crediting the evidence of his senses. Winters' nature was one of extreme reticence. His emotions at times were like great winds at sea; but he sailed with hurricane hatches clamped down. Yet now he was weeping unashamedly.

Presently he spoke: "I said that Ruth was my whole life. But sometimes a man can be faithless to his life in thought without consciously willing it."

Galton's wonder grew. "I will show her to you," said Winters, "and then you can judge of my temptation and my grief will not seem strange to you."

In silence he closed the little box, returned it to his pocket and rose from the table. "We will take the Battery Place gyroscope to my Brooklyn Heights laboratory," he said. "We can wash up, change into civilized togs; then I'll put the lichen under a 500-power microscope."

An hour and a quarter later young Galton stood in his cousin's laboratory, gazing through an eyepiece at a microscopic, white form, still in death. He caught his breath sharply. Imperishable beauty was there, the music of the spheres, all lost loveliness. The morning glory of the fire mists and weaving nebulae seemed to hover over the tiny white face, so still now as it swept toward the lands which the river of time would never again revisit.

Winters had left the room. Galton walked to the door and peered into the adjoining apartment. It was on the tip of his tongue to say: "I can understand your grief now. The woman of the lichen city was more beautiful than all the women of Earth, beautiful as a crowned queen; and I know that she will haunt me forever." But he did not speak.

Seated in a window box, overlooking the white buildings of lower New York, sat Ruth Brent. A spirit of joy danced in her dark eyes, dwelt in all the lovely lines of her face. The leader of the *Top* expedition was sitting beside her, crushing her fingers in his large hand; and their cheeks were pressed together. Silently Galton shut the door and tiptoed back into the laboratory.

The Adaptive Ultimate

*In which adaptation to environment
is carried to its final implication*

by John Jessel

DR. DANIEL SCOTT, his dark and brilliant eyes alight with the fire of enthusiasm, paused at last and stared out over the city, or that portion of it visible from the office windows of Herman Bach—the Dr. Herman Bach of Grand Mercy Hospital. There was a moment of silence; the old man smiled a little indulgently, a little wistfully, at the face of the youthful biochemist.

“Go on, Dan,” he said. “So it occurred to you that getting well of a disease or injury is merely a form of adaptation—then what?”

“Then,” flashed the other, “I began to look for the most adaptive of living organisms. And what are they? Insects! Insects, of course. Cut off a wing, and it grows back. Cut off a head, stick it to the headless body of another of the same species, and that grows back on. And what’s the secret of their great adaptability?”

Dr. Bach shrugged. “What is?”

Scott was suddenly gloomy. “I’m not sure,” he muttered. “It’s glandular, of course—a matter of hormones.” He brightened again. “But I’m off the track. So then I looked around for the most adaptive insect. And which is that?”

“Ants?” suggested Dr. Bach. “Bees? Termites?”

“Bah! They’re the most highly evolved, not the most adaptable. No; there’s one insect that is known to

produce a higher percentage of mutants than any other, more freaks, more biological sports. The one Morgan used in his experiments on the effect of hard X rays on heredity—the fruit fly, the ordinary fruit fly. Remember? They have reddish eyes, but under X rays they produced white-eyed offspring—and that was a true mutation, because the white eyes bred true! Acquired characteristics can’t be inherited, but these were. Therefore——”

“I know,” interrupted Dr. Bach.

Scott caught his breath. “So I used fruit flies,” he resumed. “I putrefied their bodies, injected a cow, and got a serum at last, after weeks of clarifying with albumen, evaporating *in vacuo*, rectifying with—— But you’re not interested in the technique. I got a serum. I tried it on tubercular guinea pigs, and”——he paused dramatically——“it cured! They adapted themselves to the tubercle bacillus. I tried it on a rabid dog. He adapted. I tried it on a cat with a broken spine. That knit. And now, I’m asking you for the chance to try it on a human being!”

Dr. Bach frowned. “You’re not ready,” he grunted. “You’re not ready by two years. Try it on an anthropoid. Then try it on yourself. I can’t risk a human life in an experiment that’s as raw as this.”

“Yes, but I haven’t got anything that needs curing, and as for an anthropoid, you get the board to allow funds to buy an ape—if you can. I’ve tried.”



"Stupid!" she said. "This is quite useless. Look!"

"Take it up with the Stoneman Foundation, then."

"And have Grand Mercy lose the credit? Listen, Dr. Bach, I'm asking for just one chance—a charity case—anything."

"Charity cases are human beings." The old man scowled down at his hands. "See here, Dan. I shouldn't even offer this much, because it's against all medical ethics, but if I find a hopeless case—utterly hopeless, you understand—where the patient himself consents, I'll do it. And that's the final word."

Scott groaned. "And try to find a case like that. If the patient's conscious, you think there's hope, and if he isn't, how can he consent? That settles it!"

BUT it didn't. Less than a week later Scott looked suddenly up at the annunciator in the corner of his tiny laboratory. "Dr. Scott," it rasped. "Dr. Scott. Dr. Scott. To Dr. Bach's office."

He finished his titration, noted the figures, and hurried out. The old man was pacing the floor nervously as Scott entered.

"I've got your case, Dan," he muttered. "It's against all ethics—yet I'll be damned if I can see how you can do this one any harm. But you'd better hurry. Come on—isolation ward."

They hurried. In the tiny cubical room Scott stared appalled. "A girl!" he muttered.

She could never have been other than drab and plain, but lying there with the pallor of death already on her cheeks, she had an appearance of somber sweetness. Yet that was all the charm she could ever have possessed; her dark, cropped, oily hair was unkempt and stringy, her features flat and unattractive. She breathed with an almost inaudible rasp, and her eyes were closed.

"Do you," asked Scott, "consider this a test? She's all but dead now."

Dr. Bach nodded. "Tuberculosis," he said, "final stage. Her lungs are hemorrhaging—a matter of hours."

The girl coughed; flecks of blood appeared on her pallid lips. She opened dull, watery blue eyes.

"So!" said Bach, "conscious, eh? This is Dr. Scott. Dan, this is—uh"—he peered at the card at the foot of the bed—"Miss—uh—Kyra Zelas. Dr. Scott has an injection, Miss Zelas. As I warned you, it probably won't help, but I can't see how it can hurt. Are you willing?"

She spoke in faint, gurgling tones. "Sure, I'm through—anyway. What's the odds?"

"All right. Got the hypo, Dan?" Bach took the tube of water-clear serum. "Any particular point of injection? No? Give me the cubital, then."

He thrust the needle into the girl's arm. Dan noted that she did not even wince at the bite of the steel point, but lay stoical and passive as thirty c.c. of liquid flowed into her veins. She coughed again, then closed her eyes.

"Come out of here," ordered Bach gruffly, and as they moved into the hall, "I'm damned if I like this. I feel like a dirty dog."

He seemed to feel less canine, however, the following day. "That Zelas case is still alive," he reported to Scott. "If I dared trust my eyes, I'd say she's improved a little. A very little. I'd still call it hopeless."

But the following day Scott found him seated in his office with a puzzled expression in his old gray eyes. "Zelas is better," he muttered. "No question of it. But you keep your head, Dan. Such miracles have happened before, and without serums. You wait until we've had her under long observation."

By the end of the week it became evident that the observation was not to

be long. Kyra Zelas flourished under their gaze like some swift-blooming tropical weed. Queerly, she lost none of her pallor, but flesh softened the angular features, and a trace of light grew in her eyes.

"The spots on her lungs are going," muttered Bach. "She's stopped coughing, and there's no sign of bugs in her culture. But the queerest thing, Dan—and I can't figure it out, either—is the way she reacts to abrasions and skin punctures. Yesterday I took a blood specimen for a Wassermann, and—this sounds utterly mad—the puncture closed almost before I had a c.c.! Closed and healed!"

And in another week, "Dan, I can't see any reason for keeping Kyra here. She's well. Yet I want her where we can keep her under observation. There's a queer mystery about this serum of yours. And besides, I hate to turn her out to the sort of life that brought her here."

"What did she do?"

"Sewed. Piece work in some sweatshop, when she could work at all. Drab, ugly, uneducated girl, but there's something appealing about her. She adapts quickly."

Scott gave him a strange look. "Yes," he said: "She adapts quickly."

"So," resumed Bach, "it occurred to me that she could stay at my place. We could keep her under observation, you see, and she could help the housekeeper. I'm interested—damn interested. I think I'll offer her the chance."

Scott was present when Dr. Bach made his suggestion. The girl Kyra smiled: "Sure," she said. Her pallid, plain face lighted up. "Thanks."

Bach gave her the address. "Mrs. Getz will let you in. Don't do anything this afternoon. In fact, it might not hurt you to simply walk in the park for a few hours."

Scott watched the girl as she walked down the hall toward the elevator. She

had filled out; but she was still spare to the point of emaciation, and her worn black suit hung on her as if it were on a frame of sticks. As she disappeared, he moved thoughtfully about his duties, and a quarter hour later descended to his laboratory.

On the first floor, turmoil met him. Two officers were carrying in the body of a nondescript old man; whose head was a bloody ruin. There was a babble of excited voices, and he saw a crowd on the steps outside.

"What's up?" he called. "Accident?"

"Accident!" snapped an officer. "Murder, you mean. Woman steps up to this old guy, picks a hefty stone from the park border, slugs him, and takes his wallet. Just like that!"

Scott peered out of the window. The Black Maria was backing toward a crowd on the park side of the street. A pair of hulking policemen flanked a thin figure in black, thrusting it toward the doors of the vehicle.

Scott gasped. It was Kyra Zelas!

II.

A WEEK LATER Dr. Bach stared into the dark fireplace of his living room. "It's not our business," he repeated.

"My God!" blazed Scott. "Not our business! How do we know we're not responsible? How do we know that our injection didn't unsettle her mind? Glands can do that; look at Mongoloid idiots and cretins. Our stuff was glandular. Maybe we drove her crazy!"

"All right," said Bach. "Listen. We'll attend the trial to-morrow, and if it looks bad for her, we'll get hold of her lawyer and let him put us on the stand. We'll testify that she's just been released after a long and dangerous illness, and may not be fully responsible. That's entirely true."

Mid-morning of the next day found them hunched tensely on benches in the

crowded courtroom. The prosecution was opening; three witnesses testified to the event.

"This old guy buys peanuts for the pigeons. Yeah, I sell 'em to him every day—or did. So this time he hasn't change, and he pulls out his wallet, and I see it's stuffed with bills. And one minute later I see the dame pick up the rock and conk him. Then she grabs the dough——"

"Describe her, please."

"She's skinny, and dressed in black. She ain't no beauty, neither. Brownish hair, dark eyes, I don't know whether dark-blue or brown."

"Your witness!" snapped the prosecutor.

A young and nervous individual—appointed by the court, the paper said—rose. "You say," he squeaked, "that the assailant had brown hair and dark eyes?"

"Yeah."

"Will the defendant please rise?"

Her back was toward Scott and Bach as Kyra Zelas arose, but Scott stiffened. Something was strangely different about her appearance; surely her worn black suit no longer hung so loosely about her. What he could see of her figure seemed—well, magnificent.

"Take off your hat, Miss Zelas," squeaked the attorney.

Scott gasped. Radiant as aluminum glowed the mass of hair she revealed!

"I submit, your honor, that this defendant does not possess dark hair, nor, if you will observe, dark eyes. It is, I suppose, conceivable that she could somehow have bleached her hair while in custody, and I therefore"—he brandished a pair of scissors—"submit a lock to be tested by any chemist the court appoints. The pigmentation is entirely natural. And as for her eyes—does my esteemed opponent suggest that they, too, are bleached?"

He swung on the gaping witness. "Is

this lady the one you claim to have seen committing the crime?"

The man goggled. "Uh—I can't—say."

"Is she?"

"N-no!"

The speaker smiled. "That's all. Will you take the stand, Miss Zelas?"

The girl moved lithe as a panther. Slowly she turned, facing the court. Scott's brain whirled, and his fingers dug into Bach's arm. Silver-eyed, aluminum-haired, alabaster pale, the girl on the stand was beyond doubt the most beautiful woman he had ever seen!

The attorney was speaking again. "Tell the court in your own words what happened, Miss Zelas."

Quite casually the girl crossed her trim ankles and began to speak. Her voice was low, resonant, and thrilling; Scott had to fight to keep his attention on the sense of her words rather than the sound.

"I had just left Grand Mercy Hospital," she said, "where I had been ill for some months. I had crossed to the park when suddenly a woman in black rushed at me, thrust an empty wallet into my hands, and vanished. A moment later I was surrounded by a screaming crowd, and—well, that's all."

"An empty wallet, you say?" asked the defense lawyer. "What of the money found in your own bag, which my eminent colleague believes stolen?"

"It was mine," said the girl, "about seven hundred dollars."

Bach hissed, "That's a lie! She had two dollars and thirty-three cents on her when we took her in."

"Do you mean you think she's the same Kyra Zelas we had at the hospital?" gasped Scott.

"I don't know. I don't know anything, but if I ever touch that damned serum of yours—— Look! Look, Dan!" This last was a tense whisper.

"What?"

AST—7

"Her hair! When the sun strikes it!"

Scott peered more closely. A vagrant ray of noon sunlight filtered through a high window, and now and again the swaying of a shade permitted it to touch the metallic radiance of the girl's hair. Scott stared and saw; slightly but unmistakably, whenever the light touched that glowing aureole, her hair darkened from bright aluminum to golden blond!

Something clicked in his brain. There was a clue somewhere—if he could but find it. The pieces of the puzzle were there, but they were woefully hard to fit together. The girl in the hospital and her reaction to incisions; this girl and her reaction to light.

"I've got to see her," he whispered. "There's something I have to find—Listen!"

The speaker was orating. "And we ask the dismissal of the whole case, your honor, on the grounds that the prosecution has utterly failed even to identify the defendant."

The judge's gavel crashed. For a moment his aging eyes rested on the girl with the silver eyes and incredible hair, then: "Case dismissed!" he snapped. "Jury discharged!"

There was a tumult of voices. Flash-lights shot instantaneous sheets of lighting. The girl on the witness stand rose with perfect poise, smiled with lovely, innocent lips, and moved away. Scott waited until she passed close at hand, then:

"Miss Zelas!" he called.

She paused. Her strange silver eyes lighted with unmistakable recognition. "Dr. Scott!" said the voice of tinkling metal. "And Dr. Bach!"

She was, then. She was the same girl. This was the drab sloven of the isolation ward, this weirdly beautiful creature of exotic coloring. Staring, Scott could trace now the very identity of her features, but changed as by a miracle.

AST-8

HE PUSHED through the mob of photographers, press men, and curiosity seekers. "Have you a place to stay?" he asked. "Dr. Bach's offer still stands."

She smiled. "I am very grateful," she murmured, and then, to the crowd of reporters, "The doctor is an old friend of mine." She was completely at ease, unruffled, poised.

Something caught Scott's eye, and he purchased a paper, glancing quickly at the photograph, the one taken at the moment the girl had removed her hat. He started; her hair showed raven black! There was a comment below the picture, too, to the effect that "her striking hair photographs much darker than it appears to the eye."

He frowned. "This way," he said to the girl, then goggled in surprise again. For in the broad light of noon her complexion was no longer the white of alabaster; it was creamy tan, the skin of one exposed to long hours of sunlight; her eyes were deep violet, and her hair—that tiny wisp unconcealed by her hat—was as black as the basalt columns of hell!

Kyra had insisted on stopping to purchase a substitute for the worn black suit, and had ended by acquiring an entire outfit. She sat now curled in the deep davenport before the fireplace in Dr. Bach's library, sheathed in silken black from her white throat to the tiny black pumps on her feet. She was almost unearthly in her weird beauty, with her aluminum hair, silver eyes, and marble-pale skin against the jet silk covering.

She gazed innocently at Scott. "But why shouldn't I?" she asked. "The court returned my money; I can buy what I please with it."

"Your money?" he muttered. "You had less than three dollars when you left the hospital."

"But this is mine now."

"Kyra," he said abruptly, "where did you get that money?"

Her face was saintlike in its purity. "From the old man."

"You—you did murder him!"

"Why, of course I did."

He choked. "My Lord!" he gasped. "Don't you realize we'll have to tell?"

She shook her head, smiling, gently from one to the other of them. "No, Dan. You won't tell, for it wouldn't do any good. I can't be tried twice for the same crime. Not in America."

"But why, Kyra? Why did you——"

"Would you have me resume the life that sent me into your hands? I needed money; money was there; I took it."

"But murder!"

"It was the most direct way."

"Not if you had happened to be punished for it," he returned grimly.

"But I wasn't," she reminded him gently.

He groaned. "Kyra," he said, shifting the subject suddenly, "why do your eyes and skin and hair darken in sunlight or when exposed to flashlight?"

She smiled. "Do they?" she asked. "I hadn't noticed." She yawned, stretched her arms above her head and her slim legs before her. "I think I shall sleep now," she announced. She swept her magnificent eyes over them, rose, and disappeared into the room Dr. Bach had given her—his own.

Scott faced the older man, his features working in emotion. "Do you see?" he hissed. "Good Lord, do you see?"

"Do you, Dan?"

"Part if it. Part of it, anyway."

"And I see part as well."

"Well," said Scott, "here it is as I see it. That serum—that accursed serum of mine—has somehow accentuated this girl's adaptability to an impossible degree. What is it that differentiates life from non-living matter? Two things, irritation and adaptation. Life adapts itself to its environment, and the greater

the adaptability, the more successful the organism.

"Now," he proceeded, "all human beings show a very considerable adaptivity. When we expose ourselves to sunlight, our skin shows pigmentation—we tan. That's adaptation to an environment containing sunlight. When a man loses his right hand, he learns to use his left. That's another adaptation. When a person's skin is punctured, it heals and rebuilds, and that's another angle of the same thing. Sunny regions produce dark-skinned, dark-haired people; northern lands produce blonds—and that's adaptation again.

"So what's happened to Kyra. Zelas, by some mad twist I don't understand, is that her adaptive powers have been increased to an extreme. She adapts instantly to her environment; when sun strikes her, she tans at once, and in shade she fades immediately. In sunlight her hair and eyes are those of a tropical race; in shadow, those of a Northerner. And—good Lord, I see it now—when she was faced with danger there in the courtroom, faced by a jury and judge who were men, she adapted to that! She met that danger, not only by changed appearance, but by a beauty so great that she couldn't have been convicted!" He paused. "But how? How?"

"PERHAPS medicine can tell how," said Bach. "Undoubtedly man is the creature of his glands. The differences between races—white, red, black, yellow—is doubtless glandular. And perhaps the most effective agent of adaptation is the human brain and neural system, which in itself is controlled partly by a little greasy mass on the floor of the brain's third ventricle, before the cerebellum, and supposed by the ancients to be the seat of the soul.

"I mean, of course, the pineal gland. I suspect that what your serum contains is the long-sought hormone *pinealin*,

and that it has caused hypertrophy of Kyra's pineal gland. And Dan, do you realize that if her adaptability is perfect, she's not only invincible, but invulnerable?"

"That's true!" gulped Scott. "Why, she couldn't be electrocuted, because she'd adapt instantly to an environment containing an electric current, and she couldn't be killed by a shot, because she'd adapt to that as quickly as to your needle pricks. And poison—but there must be limit somewhere!"

"There doubtless is," observed Bach. "I hardly believe she could adapt herself to an environment containing a fifty-ton locomotive passing over her body. And yet there's an important point we haven't considered. Adaptation itself is of two kinds."

"Two kinds?"

"Yes. One kind is biological; the other, human. Naturally a biochemist like you would deal only with the first, and equally naturally a brain surgeon like me has to consider the second as well. Biological adaptation is what all life—plants, animals, and humans—possess, and it is merely conforming to one's environment. A chameleon, for instance, shows much the same ability as Kyra herself, and so, in lesser degree, does the arctic fox, white in winter, brown in summer; or the snowshoe rabbit, for that matter, or the weasel. All life conforms to its environment to a great extent, because if it doesn't, it dies. But human life does more."

"More?"

"Much more. Human adaptation is not only conformity to environment, but also the actual changing of environment to fit human needs! The first cave man who left his cave to build a grass hut changed his environment, and so, in exactly the same sense, did Steinmetz, Edison, and as far as that goes, Julius Caesar and Napoleon. In fact, Dan, all human invention, genius, and military leadership boils down to that

one fact—changing the environment instead of conforming to it."

He paused, then continued, "Now we know that Kyra possesses the biological adaptivity. Her hair and eyes prove that. But what if she possesses the other to the same degree? If she does, God knows what the result will be. We can only watch to see what direction she takes—watch and hope."

"But I don't see," muttered Scott, "how that could be glandular."

"Anything can be glandular. In a mutant—and Kyra's as much a mutant as your white-eyed fruit flies—anything is possible." He frowned reflectively. "If I dared phrase a philosophical interpretation, I'd say that Kyra—perhaps—represents a stage in human evolution. A mutation. If one ventured to believe that, then de Vries and Weissman are justified."

"The mutation theory of evolution, you mean?"

"Exactly. You see, Dan, while it is very obvious from fossil remains that evolution occurred, yet it is very easy to prove it couldn't possibly have occurred!"

"How?"

"Well, it couldn't have occurred slowly, as Darwin believed, for many reasons. Take the eye, for instance. He thought that very gradually, over thousands of generations, some sea creature developed a spot on its skin that was sensitive to light, and that this gave it an advantage over its blind fellows. Therefore its kind survived and the others perished. But see here. If this eye developed slowly, why did the very first ones, the ones that couldn't yet see, have any better chance than the others? And take a wing. What good is a wing until you can fly with it? Just because a jumping lizard had a tiny fold of skin between foreleg and breast wouldn't mean that that lizard could survive where others died. What

kept the wing developing to a point where it could actually have value?"

"What did?"

"De Vries and Weissman say nothing did. They answer that evolution must have progressed in jumps, so that when the eye appeared, it was already efficient enough to have survival value, and likewise the wing. Those jumps they named mutations. And in that sense, Dan, Kyra's a mutation, a jump from the human to—something else. Perhaps the superhuman."

Scott shook his head in perplexity. He was thoroughly puzzled, completely baffled, and more than a little unnerved. In a few moments more he bade Bach good night, wandered home, and lay for hours in sleepless thought.

The next day Bach managed a leave of absence for both of them from Grand Mercy, and Scott moved in. This was in part simply out of his fascinated interest in the case of Kyra Zelas, but in part it was altruistic. She had confessedly murdered one man; it occurred to Scott that she might with no more compunction murder Dr. Bach, and he meant to be at hand to prevent it.

He had been in her company no more than a few hours before Bach's words on evolution and mutations took on new meaning. It was not only Kyra's chameleonlike coloring, nor her strangely pure and saintlike features, nor even her incredible beauty. There was something more; he could not at once identify it, but decidedly the girl Kyra was not quite human.

The event that impressed this on him occurred in the late afternoon. Bach was away somewhere on personal business, and Scott had been questioning the girl about her own impressions of her experience.

"But don't you know you've changed?" he asked. "Can't you see the difference in yourself?"

"Not I. It is the world that has changed."

"But your hair was black. Now it's light as ashes."

"Was it?" she asked. "Is it?"

He groaned in exasperation. "Kyra," he said, "you must know something about yourself."

Her exquisite eyes turned their silver on him. "I do," she said. "I know that what I want is mine, and"—her pure lips smiled—"I think I want you, Dan."

It seemed to him that she changed at that moment. Her beauty was not quite as it had been, but somehow more wildly intoxicating than before. He realized what it meant; her environment now contained a man she loved, or thought she loved, and she was adapting to that, too. She was becoming—he shivered slightly—irresistible!

III.

BACH must have realized the situation, but he said nothing. As for Scott, it was sheer torture, for he realized only too well that the girl he loved was a freak, a biological sport, and worse than that, a cold murderess and a creature not exactly human. Yet for the next several days things went smoothly. Kyra slipped easily into the routine; she was ever a willing subject for their inquiries and investigations.

Then Scott had an idea. He produced one of the guinea pigs that he had injected, and they found that the creature evinced the same reaction as Kyra to cuts. They killed the thing by literally cutting it in half with an ax, and Bach examined its brain.

"Right!" he said at last. "It's hypertrophy of the pineal." He stared intently at Scott. "Suppose," he said, "that we could reach Kyra's pineal and correct the hypertrophy. Do you suppose that might return her to normal?"

Scott suppressed a pang of fear. "But why? She can't do any harm as long as we guard her here. Why do

we have to gamble with her life like that?"

Bach laughed shortly. "For the first time in my life I'm glad I'm an old man," he said. "Don't you see we have to do something? She's a menace. She's dangerous. Heaven only knows how dangerous. We'll have to try."

Scott groaned and assented. An hour later, under the pretext of experiment, he watched the old man inject five grains of morphia into the girl's arm, watched her frown and blink—and adjust. The drug was powerless.

It was at night that Bach got his next idea. "Ethyl chloride!" he whispered. "The instantaneous anæsthetic. Perhaps she can't adjust to lack of oxygen. We'll try."

Kyra was asleep. Silently, carefully, the two crept in, and Scott stared down in utter fascination at the weird beauty of her features, paler than ever in the faint light of midnight. Carefully, so carefully, Bach held the cone above her sleeping face, drop by drop he poured the volatile, sweet-scented liquid into it. Minutes passed.

"That should anæsthetize an elephant," he whispered at last, and jammed the cone full upon her face.

She awoke. Fingers like slim steel rods closed on his wrist, forcing his hand away. Scott seized the cone, and her hand clutched his wrist as well, and he felt the strength of her grasp.

"Stupid," she said quietly, sitting erect. "This is quite useless—Look!"

She snatched a paper knife from the table beside the bed. She bared her pale throat to the moonlight, and then, suddenly, drove the knife to its hilt into her bosom!

Scott gulped in horror as she withdrew it. A single spot of blood showed on her flesh; she wiped it away, and displayed her skin, pale, unscarred, beautiful.

"Go away," she said softly, and they departed.

The next day she made no reference to the incident. Scott and Bach spent a worried morning in the laboratory, doing no work, but simply talking. It was a mistake, for when they returned to the library, she was gone, having, according to Mrs. Getz, simply strolled out of the door and away. A hectic and hasty search of the adjacent blocks brought no sign of her.

At dusk she was back, pausing hatless in the doorway to permit Scott, who was there alone, to watch the miraculous change as she passed from sunset to chamber, and her hair faded from mahogany to aluminum.

"Hello," she said, smiling. "I killed a child."

"What? My Lord, Kyra!"

"It was an accident. Surely you don't feel that I should be punished for an accident, Dan, do you?"

He was staring in utter horror. "How—"

"Oh, I decided to walk a bit. After a block or two, it occurred to me that I should like to ride. There was a car parked there with the keys in it, and the driver was talking on the sidewalk, so I slipped in, started it, and drove away. Naturally I drove rather fast, since he was shouting, and at the second corner I hit a little boy."

"And—you didn't stop?"

"Of course not. I drove around the corner, turned another corner or two, and then parked the car and walked back. The boy was gone, but the crowd was still there. Not one of them noticed me." She smiled her saintlike smile. "We're quite safe. They can't possibly trace me."

Scott dropped his head on his hands and groaned. "I don't know what to do!" he muttered. "Kyra, you're going to have to report this to the police."

"But it was an accident," she said

gently, her luminous silver eyes pityingly on Scott.

"No matter. You'll have to."

She placed her white hand on his head. "Perhaps to-morrow," she said. "Dan, I have learned something. What one needs in this world is power. As long as there are people in the world with more power than I, I run afoul of them. They keep trying to punish me with their laws—and why? Their laws are not for me. They cannot punish me."

He did not answer.

"Therefore," she said softly, "to-morrow I go out of here to seek power. I will be more powerful than any laws."

That shocked him to action. "Kyra!" he cried. "You're not to try to leave here again." He gripped her shoulders. "Promise me! Swear that you'll not step beyond that door without me!"

"Why, if you wish," she said quietly.

"But swear it! Swear it by everything sacred!"

Her silver eyes looked steadily into his from a face like that of a marble angel. "I swear it," she murmured. "By anything you name, I swear it, Dan."

And in the morning she was gone, taking what cash and bills had been in Scott's wallet, and in Bach's as well. And, they discovered later, in Mrs. Getz's also.

"BUT if you could have seen her!" muttered Scott. "She looked straight into my eyes and promised, and her face was pure as a madonna's. I can't believe she was lying."

"The lie as an adaptive mechanism," said Bach, "deserves more attention than it has received. Probably the original liars are those plants and animals that use protective mimicry—harmless snakes imitating poisonous ones, stingless flies that look like bees. Those are living lies."

"But she couldn't——"

"She has, however. What you've told me about her desire for power is proof enough. She's entered the second adaptive phase—that of adapting her environment to herself instead of herself to her environment. How far will her madness—or her genius—carry her? There is very little difference between the two, Dan. And what is left now for us to do but watch?"

"Watch? How? Where is she?"

"Unless I'm badly mistaken, watching her will be easy once she begins to achieve. Wherever she is, I think we—and the rest of the world—will know of it soon enough."

But weeks dropped away without sign of Kyra Zelas. Scott and Bach returned to their duties at Grand Mercy, and down in his laboratory the biochemist disposed grimly of the remains of three guinea pigs, a cat, and a dog, whose killing had been an exhausting and sickening task. Into the crematory as well went a tube of water-clear serum.

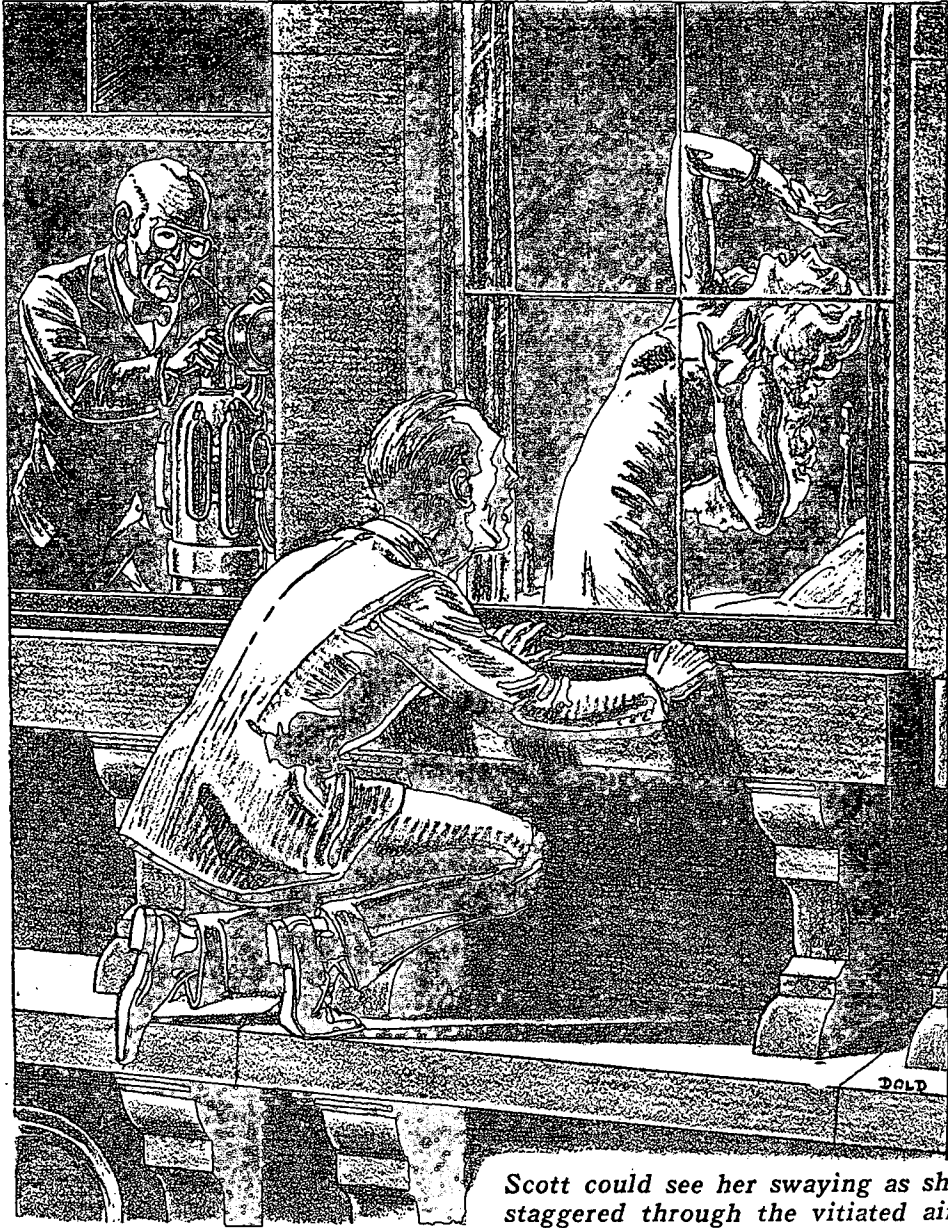
Then one day the annunciator summoned him to Bach's office, where he found the old man hunched over a copy of the *Post Record*.

"Look there!" he said, indicating a political gossip column called "Whirls of Washington."

Scott read, "And the surprise of the evening was the *soi-disant* confirmed bachelor of the cabinet, upright John Callan, who fluttered none other than the gorgeous Kyra Zelas, the lady who affects a dark wig by day and a white by night. Some of us remember her as the acquittée of a murder trial."

Scott looked up. "Callan, eh? Secretary of the treasury, no less! When she said power she meant power, apparently."

"But will she stop there?" mused Bach gloomily. "I have a premonition that she's just beginning."



Scott could see her swaying as she staggered through the vitiated air. She raised her hand to smash the pane—

"Well, actually, how far can a woman go?"

The old man looked at him. "A woman? This is Kyra Zelas, Dan. Don't set your limits yet. There will be more of her."

Bach was right. Her name began to appear with increasing frequency, first

in social connections, then with veiled references to secret intrigues and influences.

Thus: "Whom do the press boys mean by the tenth cabineteer?" Or later: "Why not a secretary of per-

sonal relations? She has the powers; give her the name." And still later: "One has to go back to Egypt for another instance of a country whose exchequer was run by a woman. And Cleopatra busted that one."

Scott grinned a little ruefully to himself as he realized that the thrusts were becoming more indirect, as if the press itself were beginning to grow cautious. It was a sign of increasing power, for nowhere are people as sensitive to such trends as among the Washington correspondents. Kyra's appearances in the public prints began to be more largely restrained to purely social affairs, and usually in connection with John Callan, the forty-five-year-old bachelor secretary of the treasury.

Waking or sleeping, Scott never for a moment quite forgot her, for there was something mystical about her, whether she were mad or a woman of genius, whether freak or superwoman. The only thing he did forget was a thin girl with drab features and greasy black hair who had lain on a pallet in the isolation ward and coughed up flecks of blood.

IV.

IT WAS no surprise to either Scott or Dr. Bach to return one evening to Bach's residence for a few hours' conversation, and find there, seated as comfortably as if she had never left it, Kyra Zelas. Outwardly she had changed but little; Scott gazed once more in fascination on her incredible hair and wide, innocent silver eyes. She was smoking a cigarette, and she exhaled a long, blue plume of smoke and smiled up at him.

He hardened himself. "Nice of you to honor us," he said coldly. "What's the reason for this visit? Did you run out of money?"

"Money? Of course not. How could I run out of money?"

"You couldn't, not as long as you replenished your funds the way you did when you left."

"Oh, that!" she said contemptuously. She opened her hand bag, indicating a green mass of bills. "I'll give that back, Dan. How much was it?"

"To hell with the money!" he blazed. "What hurts me is the way you lied. Staring into my eyes as innocent as a baby, and lying all the time!"

"Was I?" she asked. "I won't lie to you again, Dan. I promise."

"I don't believe you," he said bitterly. "Tell us what you're doing here, then."

"I wanted to see you. I haven't forgotten what I said to you, Dan." With the words she seemed again to grow more beautiful than ever, and this time poignantly wistful as well.

"And have you," asked Bach suddenly, "abandoned your idea of power?"

"Why should I want power?" she rejoined innocently, flashing her magnificent eyes to him.

"But you said," began Scott impatiently, "that you——"

"Did I?" There was the ghost of a smile on her perfect lips. "I won't lie to you, Dan," she went on, laughing a little. "If I want power, it is mine for the taking—more power than you dream."

"Through John Callan?" he rasped. "He offers a simple way," she said impassively. "Suppose, for instance, that in a day or so he were to issue a statement—a supremely insulting statement—about the war debts. The administration couldn't afford to reprimand him openly, because most of the voters feel that a supremely insulting statement is called for. And if it were insulting enough—and I assure you it would be—you would see the animosity of Europe directed westward."

"Now, if the statement were one that

no national government could ignore and yet keep its dignity in the eyes of its people, it would provoke counter-insults. And there are three nations—you know their names as well as I—who await only such a diversion of interest. Don't you see?" She frowned.

"How stupid you both are!" she murmured, and then, stretching her glorious figure and yawning, "I wonder what sort of empress I would make. A good one, doubtless."

But Scott was aghast. "Kyra, do you mean you'd urge Callan into such a colossal blunder as that?"

"Urge him!" she echoed contemptuously. "I'd force him."

"Do you mean you'd do it?"

"I haven't said so," she smiled. She yawned again, and snapped her cigarette into the dark fireplace. "I'll stay here a day or two," she added pleasantly, rising. "Good night."

Scott faced Dr. Bach as she vanished into the old man's chamber. "Damn her!" he grated, his lips white. "If I believed she meant all of that——"

"You'd better believe it," said Bach.

"Empress, eh! Empress of what?"

"Of the world, perhaps. You can't set limits to madness or genius."

"We've got to stop her!"

"How? We can't keep her locked up here. In the first place, she'd doubtless develop strength enough in her wrists to break the locks on the doors, and if she didn't, all she'd need to do is shout for help from a window."

"We can have her adjudged insane!" flared Scott. "We can have her locked up where she can't break out or call for help."

"Yes, we could. We could if we could get her committed by the Sanity Commission. And if we got her before them, what chance do you think we'd have?"

"All right, then," said Scott grimly,

"we're going to have to find her weakness. Her adaptability can't be infinite. She's immune to drugs and immune to wounds, but she can't be above the fundamental laws of biology. What we have to do is to find the law we need."

"You find it, then," said Bach gloomily.

"But we've got to do something. At least we can warn people——" He broke off, realizing the utter absurdity of the idea.

"Warn people!" scoffed Bach. "Against what? We'd be the ones to go before the Sanity Commission then. Callan would ignore us with dignity, and Kyra would laugh her pretty little laugh of contempt, and that would be that."

Scott shrugged helplessly. "I'm staying here to-night," he said abruptly. "At least we can talk to her again tomorrow."

"If she's still here," remarked Bach ironically.

But she was. She came out as Scott was reading the morning papers alone in the library, and sat silently opposite him, garbed in black silk lounging pajamas against which her alabaster skin and incredible hair glowed in startling contrast. He watched skin and hair turn faintly golden as the morning sun lightened the chamber. Somehow it angered him that she should be so beautiful and at the same time deadly with an inhuman deadliness.

He spoke first. "You haven't committed any murders since our last meeting, I hope." He said it spitefully, viciously.

She was quite indifferent. "Why should I? It has not been necessary."

"You know, Kyra," he said evenly, "that you ought to be killed."

"But not by you, Dan. You love me."

He said nothing. The fact was too obvious to deny.

"Dan," she said softly, "if you only had my courage, there is no height we might not reach together. No height—if you had the courage to try. That is why I came back here, but—" She shrugged. "I go back to Washington to-morrow."

LATER in the day Scott got Bach alone. "She's going to-morrow!" he said tensely. "Whatever we can do has to be done to-night."

The old man gestured helplessly. "What can we do? Can you think of any law that limits adaptability?"

"No, but—" He paused suddenly. "By Heaven!" he cried. "I can! I've got it!"

"What?"

"The law! A fundamental biological law that must be Kyra's weakness!"

"But what?"

"This! No organism can live in its own waste products! Its own waste is poison to any living thing!"

"But—"

"Listen. Carbon dioxide is a human waste product. Kyra can't adapt to an atmosphere of carbon dioxide!"

Bach stared. "By Heaven!" he cried. "But even if you're right, how—"

"Wait a minute. You can get a couple of cylinders of carbonic acid gas from Grand Mercy. Can you think of any way of getting the gas into her room?"

"Why—this is an old house. There's a hole from her room to the one I'm using, where the radiator connection goes through. It's not tight; we could get a rubber tube past the pipe."

"Good!"

"But the windows! She'll have the windows open."

"Never mind that," said Scott. "See that they're soaped so they'll close easily, that's all."

"But even if it works, what good— Dan! You don't mean to kill her!"

He shook his head. "I—couldn't," he whispered. "But once she's helpless, once she's overcome—if she is—you'll operate. That operation on the pineal you suggested before. And may Heaven forgive me!"

Scott suffered the tortures of the damned that evening. Kyra was, if possible, lovelier than ever, and for the first time she seemed to exert herself to be charming. Her conversation was literally brilliant; she sparkled, and over and over Scott found himself so fascinated that the thought of the treachery he planned was an excruciating pain. It seemed almost a blasphemy to attempt violence against one whose outward appearance was so pure, so innocent, so saintlike.

"But she isn't quite—human!" he told himself. "She's not an angel but a female demon, a—what were they called?—an incubus!"

Despite himself, when at last Kyra yawned luxuriously and dropped her dainty feet to the floor to depart, he pleaded for a few moments more.

"But it's early," he said, "and to-morrow you leave."

"I will return, Dan. This is not the end for us."

"I hope not," he muttered miserably, watching the door of her room as it clicked shut.

He gazed at Bach. The older man, after a moment's silence, whispered, "It is likely that she sleeps almost at once. That's also a matter of adaptability."

In tense silence they watched the thin line of light below the closed door. Scott started violently when, after a brief interval, her shadow crossed it and it disappeared with a faint click.

"Now, then," he said grimly. "Let's get it over."

He followed Bach into the adjacent

room. There, cold and metallic, stood the gray cylinders of compressed gas. He watched as the old man attached a length of tubing, ran it to the opening around the steam pipe, and began to pack the remaining space with wet cotton.

Scott turned to his own task. He moved quietly into the library. With utmost stealth he tried the door of Kyra's room; it was unlocked as he had known it would be, for the girl was supremely confident of her own invulnerability.

For a long moment he gazed across at the mass of radiant silver hair on her pillow, then, very cautiously, he placed a tiny candle on the chair by the door, so that it should be at about the level of the bed, lighted it with a snap of his cigarette lighter, withdrew the door key, and departed.

He locked the door on the outside, and set about stuffing the crack below it with cotton. It was far from air-tight, but that mattered little, he mused, since one had to allow for the escape of the replaced atmosphere.

He returned to Bach's room. "Give me a minute," he whispered. "Then turn it on."

He stepped to a window. Outside was a two-foot ledge of stone, and he crept to this precarious perch. He was visible from the street below, but not markedly noticeable, for he was directly above an areaway between Bach's house and its neighbor. He prayed fervently to escape attention.

He crept along the ledge. The two windows of Kyra's chamber were wide, but Bach had done his work. They slid downward without a creak, and he pressed close against the glass to peer in.

Across the room glowed the faint and steady flame of his little taper. Close beside him, within a short arm's length had no pane intervened, lay Kyra, quite visible in the dusk. She lay on her

back, with one arm thrown above her unbelievable hair, and she had drawn only a single sheet over her. He could watch her breathing, quiet, calm, peaceful.

It seemed as if a long time passed. He fancied at last that he could hear the gentle hiss of gas from Bach's window, but he knew that that must be only fancy. In the chamber he watched there was no sign of anything unusual; the glorious Kyra slept as she did everything else—easily, quietly, and confidently.

THEN there was a sign. The little candle flame, burning steadily in the draughtless air, flickered suddenly. He watched it, certain now that its color was changing. Again it flickered, flared for a moment, then died. A red spark glowed on the wick for a bare instant, then that was gone.

The candle flame was smothered. That meant a concentration of eight or ten per cent of carbon dioxide in the room's atmosphere—far too high to support ordinary life. Yet Kyra was living. Except that her quiet breathing seemed to have deepened, she gave not even a sign of inconvenience. She had adapted to the decreased oxygen supply.

But there must be limits to her powers. He blinked into the darkness. Surely—surely her breathing was quickening. He was positive now; her breast rose and fell in convulsive gasps, and somewhere in his turbulent mind the scientist in him recorded the fact.

"Cheyne-Stokes breathing," he muttered. In a moment the violence of it would waken her.

It did. Suddenly the silver eyes started open. She brushed her hand across her mouth, then clutched at her throat. Aware instantly of danger, she thrust herself erect, and her bare legs flashed as she pushed herself from the

bed. But she must have been dazed, for she turned first to the door.

He saw the unsteadiness in her movements. She twisted the doorknob, tugged frantically, then whirled toward the window. He could see her swaying as she staggered through the vitiated air, but she reached it. Her face was close to his, but he doubted if she saw him, for her eyes were wide and frightened, and her mouth and throat were straining violently for breath. She raised her hand to smash the pane; the blow landed, but weakly, and the window shook but did not shatter.

Again her arm rose, but that blow was never delivered. For a moment she stood poised, swaying slowly, then her magnificent eyes misted and fluttered closed, she dropped to her knees, and at last collapsed limply on the floor.

Scott waited a long, torturing moment, then thrust up the window. The rush of lifeless air set him whirling dizzily on his dangerous perch, and he clutched the casement. Then a slow breeze moved between the buildings, and his head cleared.

He stepped gingerly into the chamber. It was stifling, but near the open window he could breathe. He kicked thrice against Bach's wall.

The hiss of gas ceased. He gathered Kyra's form in his arms, waited until he heard the key turn, then dashed across the room and into the library.

Bach stared as if fascinated at the pure features of the girl. "A goddess overcome," he said. "There is something sinful about our part in this."

"Be quick!" snapped Scott. "She's unconscious, not anæsthetized. God knows how quickly she'll readjust."

But she had not yet recovered when Scott laid her on the operating table in Bach's office, and drew the straps about her arms and body and slim bare legs. He looked down on her still, white face

and bright hair, and he felt his heart contract with pain to see them darken ever so faintly and beautifully under the brilliant operating light, rich in actinic rays.

"You were right," he whispered to the unhearing girl. "Had I your courage there is nothing we might not have attained together."

Bach spoke brusquely. "Nasal?" he asked. "Or shall I trephine her?"

"Nasal."

"But I should like a chance to observe the pineal gland. This case is unique, and——"

"Nasal!" blazed Scott. "I won't have her scarred!"

Bach sighed and began. Scott, despite his long hospital experience, found himself quite unable to watch this operation: he passed the old man his instruments as needed, but kept his eyes averted from the girl's passive and lovely face.

"So!" said Bach at last. "It is done." For the first time he himself had a moment's leisure to survey Kyra's features.

Bach started violently. Gone was the exquisite aluminum hair, replaced by the stringy, dark, and oily locks of the girl in the hospital! He pried open her eye, silver no longer, but pallid blue. Of all her loveliness, there remained—what? A trace, perhaps; a trace in the saintlike purity of her pale face, and in the molding of her features. But a flame had died; she was a goddess no longer, but a mortal—a human being. The superwoman had become no more than a suffering girl.

An ejaculation had almost burst from his lips when Scott's voice stopped him.

"How beautiful she is!" he whispered.

Bach stared. He realized suddenly that Scott was not seeing her as she was, but as she once had been. To his eyes, colored by love, she was still Kyra the magnificent.

The Mail Bag

An afternoon taken up with letters, many of them helpful. A man writes to inquire if we would be interested in another serial like "Lo!" only more scientific. Another man, a doctor on his way to a mission in Moravia, writes an appreciation of our stories—and a very helpful criticism of our illustrations. Exactly thirteen letters saying "The Blue Infinity" was a poor story. Twenty-seven letters saying it was great!

Three letters say we are afraid to print a slam. Checking back, I find that the August issue contained nothing but slams in Brass Tacks. These readers must have missed that. I don't know how it happened. I try to keep a proportionate balance and the vast majority of the readers are appreciative.

About a dozen requests for us to get Charles Willard Diffin. Well, he's here!

Stanley G. Weinbaum has been very ill. I hope he's able to sit up and enjoy this month's cover and to see "The Red Peri" in print.

A lot of letters still devoted to the alphabetical society—and fifteen letters asking me not to waste space printing them any longer. I'm inclined to agree that the kick has gone out of their debate.

Thirty-one letters discussing the amount of science most desirable in our stories. These letters are most intelligently written and are very helpful. I appreciate them. They are combining to formulate our policy standard for the coming months.

Three or four letters said that the September cover looked like a glorified lollipop. I think it was a fine piece of work.

It is notable in going through the mail that those least qualified by experience make the most sweeping statements. Those whose judgment has been improved through reading, make helpful comments and criticisms that have a basis of reason.

The question of science editorials comes up again. Think I'll just wait for a larger number of opinions.

Glad to hear some of the small clubs are combining. If that process continues, we will see superscience become a living force in America.

Letters from Great Britain are on the increase. That's a healthy sign.

Two hundred and eighty-seven letters this month. It's going to be a tough job sorting out twenty-five or thirty for Brass Tacks! The longest ones go out first. They take too much space. Let's see, now: this is good—and this—and this—and we still haven't room enough.—The Editor.

I AM NOT GOD



Up to Now:

A new nebula, known as G 113, and radiating a poisonous gas, pseudonebulium, has just been discovered by an astronomer in the Peters Observatory. Stephen Dodd, chemist, has discovered the secret of pseudonebulium. Having experimented on a mouse, he has worked ceaselessly and unsuccessfully to find the antidote which will restore life to the victim.

Samuel Gardner, famous astronomer, with whose daughter Stephen is in love, is actively interested in the experiment, although not even to him does Stephen

The crew of the bomber evidently sensed their purpose to crash. They swerved desperately. Steve uttered a prayer and swung straight into its path.

1017-

Concluding the story of a man who tried to change the destiny of a world

by Nat Schachner

disclose the terrible properties of pseudonebulium.

About the time that the War Lord, ambitious dictator of a foreign country, takes steps to appropriate this new poisonous gas and become ruler of the world, Stephen discovers that the recently discovered nebula is directly approaching the earth at an incredible speed, surrounded by a gas that is fatal to all humanity. Only a few, however, have faith in his prediction.

The War Lord, failing in his attempt to acquire pseudonebulium, sets about forcefully to conquer the world. Stephen, unable to obtain sufficient funds to carry on his search for the antidote calls in Dr. George Cunningham, Dr. William Clay, Henry Claiborne, Herr Josef Kuntz, and Armand Hanteaux, all specialists in medicine or biology. He convinces them of the danger, and they join him in his work.

Oscar Folch, secret agent of the War Lord, uninvited, comes to the meeting, and is accepted because of his ability to build apparatus.

In the midst of the proceedings, the nebula reaches the orbit of the earth, and all humanity is stricken by the gas with the exception of Stephen who, in a lead-impregnated suit, carries on his experiment, until he, too, is overcome. But the antidote has begun to function—

X.

LIGHT struggled painfully through the welter of darkness. Huge waterfalls roared somewhere in the darkness; the noise of falling waters grew in intensity until it was almost

insupportable. Trip-hammers took up the refrain, pounded on hard rock with repetitious thunders. Steve's skull was bursting; he could not stand the unending clamor any longer. He thrust out a feeble arm to ward it off, to brush it from his consciousness as though it were a cosmic buzzing fly.

Then he sat up, pulling himself erect against the weight of the lead-saturated suit in which he was clothed. What was the matter? Where was he? What had happened?

Bright sunlight streamed through the street window. It was warm and dancing and golden. No haze obscured its mote-kissed passage, no green tinge gave it a sinister tone. Steve pressed his aching head with a gloved hand, and found hard metal in the way. Why had he thought just then of green? Why had the color evocation brought unaccountable shivers to his pain-racked body? Why was he dressed in helmet and heavy clothes?

His bleary eyes moved painfully around. They fell upon the glass tank, empty now, upon a screen which even in the bright radiance of the sunlight gave off little dartles of flame, upon a deep receptacle under a pet cock in which a heavy, wine-dark liquor glowed like a stained glass window.

With a weak cry Steve thrust his weighted form upward. His hands tore at the broken helmet, sent it crashing across the room. He swerved unsteadily around, dreading what he would see. A great groan burst from pale, quivering lips.

Deborah sat in her chair, slumped slightly over, as if she were asleep. All

around the room, huddled into contorted positions, lay the others; silent, unmoving, fixed in immutable catalepsy.

Awareness flooded Steve then. The events of the past few days swarmed in his consciousness. The deadly nebula from extrastellar space had passed through the earth as though it were a sieve, had gone on its way, leaving behind—what?

He staggered to the window. It took a tremendous effort to lift the sash. He leaned out dizzily. Once the street had been a main thoroughfare; now it was a desolation and a grave. Thousands lay just as they had fallen, sprawled on the sidewalks, flooding the asphalt with heaped forms. An automobile had telescoped itself against the side of a building. Behind it was a trail of crushed and mangled bodies.

He hung limply to the sill. It was gradually coming to him, slowly, but inexorably. In all this world of former teeming millions, in all this earth where humanity's hordes had lived and loved, fought and hated, read the stars and soared on the viewless wings of the imagination, groveled in the slime, lusted, hungered, pondered, coveted, and been both beast and god, inextricably intertwined—he alone was alive! He, Stephen Dodd, heir of all the ages, sole existing representative of the human race, emperor of the earth, possessed of all its gold and fabulous wealth, of buildings and harvests and forests and the fruits thereof, of yachts and machines and tools and precious gems.

Then suddenly the mood dropped from Steve like a cloak. Fear gripped him tight. Alone! No more horrible word had ever existed.

Steve pressed his eyeballs with tight fingers. If only he had one person with whom to share this terrible desolation; if only he could look into human eyes instinct with sympathy, with comprehension; if only he could hear the sound

of another voice to break this awful silence. He had tried his own, and he would never try it again. It had shrilled with approaching madness.

His arms went out blindly, imploringly. Deborah! If only she were alive to share his domain, life might yet be bearable.

Exalted for the moment he turned, to see the girl moveless in her chair, even as the others, immersed in the strange sleep of pseudonebulium from which there was no waking. The fuddlement had not quite left his brain.

Then his eyes wandered in a stupor of despair, rested once more on the dark-red liquid. Out of the corner of his eye he could see the hypodermic on the floor, where it had dropped as he had fallen.

HE BLINKED. A vague excitement filled his veins, surged into ecstatic awareness. Fool that he had been! Of course! How else had he managed to survive the holocaust? He remembered now—Deborah's insistence on his donning his protective suit, the slow suffocation, the completion of the reaction, his last desperate efforts to inject the fluid before he strangled, the sharp jab of the needle—then darkness.

He could hardly catch his breath. Would it work again—now, after the gas had had time to fix itself into the blood? Was the time element important? How long was it since the nebula had come? How long had he remained unconscious?

It had been midnight when they had succumbed. It was bright day now—from the position of the sun, it must be just about noon. He looked quickly at the clock on the wall. The hands pointed to ten minutes to six. It had stopped. A cold hand clutched his heart. It was an eight-day clock, and he remembered distinctly rewinding it on the morning of the fatal day. Poor George Cunningham had even made

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some jest about winding it only one sixteenth of the way. They wouldn't need it after that.

That meant only one thing. More than eight days had elapsed while he had lain in his coma. How much longer? It was impossible ever to know. But the bodies of the stricken people, his own, too, had not wasted appreciably. He remembered the first mouse. It was about the twentieth day when it had started to shrivel.

With grim tautness he divested himself of his clumsy suit. There would be no more need for it. With painful deliberation he picked up the hypodermic, washed it clean. Then he dipped it into the liquid antidote, withdrew it again. For long seconds he stared at it in fascination. He was surprised to find his hand steady and rigid. On that sharp, glistening instrument depended — He started to shake. Deborah! Gardner, her father! George Cunningham! The destiny of a world hung breathless in the balance.

He straightened savagely, walked with careful slowness to the side of the girl he loved. She was asleep, or dead, or a strange combination of both. His heart thumped at the sight of her sweet oval face, her eyes mercilessly closed. Thank heavens they were not open! The needle point grazed the smooth satin of her forearm. Eternities of dreadful hesitation. Then it sank deep into the flesh. He quickly pressed the plunger—

Steve's eyes burned into the limp form before him. But there was no movement, no change, no sign of returning life. A vast, helpless despair seized him. Better if he, too, had succumbed with the rest of them. Better anything than this aching solitude. Fool! You were unconscious for more than eight days before the antidote worked. Why do you expect miracles now? But he found no comfort in that, for he knew the answer. The nebular

gas had impregnated the atmosphere that length of time. As fast as the elixir de-ionized the fixated molecules in his blood, more had taken their place.

A fierce resolve shook him. He took a deep breath, squared his shoulders, and walked steadily toward the cradle in which the flask still rested with its green-glowing contents. The pseudo-nebulium he had evolved. One quick, sharp tap on the leaded glass, and the lethal gas would flow over and through him. The last solitary spark of life left in the world would flicker out. He would be at one with his fellows. It was the best way.

His hand made a fist as it raised high in the air. And there it froze. For there was a strange sound behind him; the sound of some one stirring uneasily in a chair. He whirled and raced for the girl. "Deborah!" he cried. It was a sob, a joyous shout, a prayer of thanksgiving. He was no longer alone!

Her eyes were sleepy with tenderness upon him as he enfolded her in his arms, and felt the blessed beat of her heart against his. "What happened?" she whispered.

He told her, hugging her fiercely all the time as if she might slip away from him again into the limbo of forgotten things. Her eyes widened as the story unfolded.

"Listen, darling," he said finally. "It had just come to me again—a vision! Do you know what we are? A new Adam and a new Eve! Man and woman created, we ourselves, to inhabit a new earth. Think what it means! With us, just the two of us, might rest the future of this planet, the rebuilding of a cleaner, finer, better world." His eyes burned on her with mounting enthusiasm.

"Perhaps the catastrophe of the nebula was nature's method of cleansing this planet of the vermin who inhabited it, to make room for a race of supermen.

Humanity thus far has been an experiment that turned out badly. For thousands of years they have struggled from the ape, aspiring toward the stars. For a while it seemed as if they were succeeding. But as they grew in knowledge, in the mastery of nature, they descended more and more into the brute. Look, darling, at the civilization which has just been erased. Man fought with man, with sly cunning, with greed and selfishness, with the weapons he wrested from the earth. There was enough for every one; yet most of mankind starved. There was room for all, yet they killed and mangled each other to gain territory they could not inhabit. A filthy world! a vile world! Thank Heaven it has been cleansed and purified."

He bent closer to her, whispering. "Our children will inherit the earth. We shall teach them the learning of mankind, and—what is more important—love and generosity and kindness and the dignity of the individual. Don't you see them down the vistas of time, creating a new paradise?"

Deborah flushed, and closed her eyes as if to savor the vision. Then she opened them again with a start, staring at the sprawled form of Samuel Gardner, her father. A layer of dust covered his clothes, his thin, kindly face.

"Oh!" she wailed, "to think we had forgotten. Steve!" She grasped the young chemist's arm imploringly. "You must wake him at once!"

Steve shook himself like a swimmer breaking surface water again after a long dive. It had been a good dream, but—"Naturally, darling," he muttered. Samuel Gardner was his friend, possessed of all the qualities he had enumerated. The new earth needed him. And he was Deborah's father. So it was that some ten minutes later Deborah was sobbing affectionate explanations into the ear of a rather befuddled parent.

XI.

GARDNER looked around with a little shiver. "Do you realize what you are now, Steve?" he said very slowly. "The sole and absolute arbiter of life and death for each and every individual in the world. You have the power to save or destroy the race with a gesture; you can pick and choose and say, 'this man lives; this man dies!' The destiny of mankind rests in the hollow of your hand. Great heavens, Steve!" he went on with a tinge of awe, "you are almost in a position to play God!"

The young chemist stared off into unfathomable spaces; just as if the walls of the enclosing room were so much emptiness. There was a strange look in his eyes. "I intend playing at God." There was no hint of sacrilege in the quiet, simple way he put it.

"What do you mean?" Gardner demanded quickly. Deborah watched him with flushed cheeks and parted lips, but said nothing.

"This! I have enough of the antidote already prepared to awaken some five hundred people. I shall not bring them back to life indiscriminately. I've already outlined my plan to Deborah." He did not say of course on what a restricted scale it had been first proposed.

"The world has had a cleansing. It is the greatest opportunity that has ever existed for a rebuilding of civilization. I shall pick and choose—with your help—those whose revival would prove of distinct assistance to the new world we are contemplating. Scientists, doctors, writers, painters, men and women of sound bodies and sounder understandings, men and women who can give to their offspring a heritage of unlimited possibilities."

Gardner shook his lean, scholarly head doubtfully. "In any event, there are more than five hundred in the world who possess the qualities you stress."

"Of course. Within four or five

days I can make up sufficient quantities of the antidote to arouse the whole world if necessary. I can obtain the necessary materials from Kungesser's." He grinned. "There'll be no one to call a halt to burglary this time, and fast planes to European centers will tap unlimited supplies."

"And what will happen to those you do not awake?"

"They will gradually wither away to things of skin and skeleton," Steve answered. "Eventually they can be buried." At Deborah's faint gasp he went on quickly. "I know it sounds brutal and callous. But we cannot permit the world to proceed as it has in the past. Within another few months all civilization would have been in ruins. The opportunity has been thrust into our hands and we must use it." He was obviously attempting justification to himself as well as to the others.

Deborah slipped down to the dusty floor, lifted one of the unstimulating pigtailed Kuntz girls. "The children first, Steve, please. My heart aches to see the poor things in this horrible condition."

Gardner stared at the young chemist quizzically. "Well? This is your first choice. First choices are always the most important. Do they live, or do they"—he made a significant gesture—"wither away?"

Steve stared with frowning intensity at the six silent children, five girls and one little boy. Their faces were smooth and unlined and inscrutable as blank paper. What would they be like when they grew up?

"Of course," Steve said after a short pause. "They are young; they can be readily molded to the new ways; and their heredity is good." With quick, rapid movements he injected the antidote into their veins. It took ten minutes for it to take effect. Then, while Deborah bent over them, arranging their little limbs into more comfortable posi-

tions, Steve filled the hypodermic again. Gardner watched him with grave interest, making as yet no attempt to interfere.

The first adult Steve injected was Dr. Cunningham. It was done without hesitation. Henry Claiborne next. Then Josef Kuntz. At Dr. William Clay he paused a moment, then the plunger went home. Armand Hanteaux was the last male figure. He sprawled face upward. His great black beard swept his chest. His bold black eyes were open, and seemed to mock Steve as he bent over him. Twice Steve held the needle ready; twice he stopped.

"What's the matter, Steve?" Gardner asked slyly. "Hanteaux's a great physicist, isn't he?" But the older man knew what was in his mind without being told.

"Yes, he is," Steve admitted. The puzzled hesitance on his knit brow did not smooth away. "But there are other things——"

"I know," Gardner acknowledged. "Yet we need him; the new world needs him."

Steve sighed. "I suppose so." The hypodermic went in with a certain vicious intensity.

A joyful cry came from Deborah. "Look! They're waking up. The little darlings!"

It was true. The children were stirring uneasily, as if just coming out of a heavy sleep. By the time they had been taken care of, and soothed and petted into wide-eyed quiescence again, the men had all revived and risen shakily from their prone positions. A veritable torrent of explanations ensued, to be cut short by a sudden outcry from Josef Kuntz. He had seen the unmoving figure of his wife. He darted to her side, sank to his knees frantically and chafed her cold, limp hands with little sobs. "Anna! *Mein liebe Anna!* Speak to me! It is your Josef who implores you!"

He looked up wildly. His meek eyes were bright with tears. "Herr Dodd! You haf forgotten my Anna!"

It was pathetic to see the famous chemist pleading for restoration to his former browbeaten and harried condition. Steve shrugged his shoulders. After all, he had no right to withhold life from Mrs. Kuntz, even though she was not exactly fit material for the new world. Her husband obviously loved her, and there were the four pigtailed children to be considered.

It was with less hesitation that he approached the stout, comfortable form of Mrs. Clay. She had impressed him as a kindly, warm-hearted creature, and she had adored her tall, pale husband and their two youngsters.

Dr. William Clay barred his way. His voice was dry and rasping. "I think, Dodd," he said without expression, "that if your plan is to work, a start at discrimination must be made somewhere."

SILENCE fell like a physical thing on the room. All eyes turned on the tall, thin-lipped man. He did not seem to mind. "My wife," he went on, "was a rather common, vulgar sort of woman. I married her when I was much younger—and a bit foolish. She has nothing that could pass as brains. She would be a hindrance rather than a asset to your new world."

For a moment the stunned silence was insupportable. Then Deborah's shocked voice arose. "But she is your wife; the mother of your children!"

Clay turned to her. A strange light glowed in his pale eyes. They flicked with veiled approval over her slender form, then down at the still motionless figure of Clara Claiborne, passed rapidly and contemptuously over Herr Kuntz and the hard-visaged woman he was fondling, then his gaze slid toward the open window, and the wide world of as yet unawakened women.

"What of it?" he demanded tonelessly. "That still does not give her brains, good looks. Those are what are needed for a new civilization. Look at her!" He stared down with a grimace of loathing. "Old, fat, foolish!"

The little boy and little girl held on to each other's hand with desperate tightness. "Mummy!" they whimpered. "Wake up, mummy!"

Steve went dark with anger. "Get out of my way, Clay," he said very low. The doctor fell back involuntarily from the blaze of wrath in the young chemist's face. He made no further movement to stop him. But there was a covert sneer on his saturnine countenance as he watched Steve drive the plunger down.

Now there was only Clara Claiborne. Her voluptuous figure was draped over a chair. Her lips were scarlet pouts, and her long lashes, heavily mascaraed, hid her eyes.

Steve squared his shoulders for an unpleasant duty. Already his marvelous plan, so clear-cut and simple when he had enthusiastically proclaimed it to the others, was striking snags. And if this occurred within this select and carefully chosen circle, what would be the result when he applied it to the world at large? Nevertheless there was nothing he could do about Clara Claiborne now. She was one of them; she was Henry Claiborne's wife. So, with reluctant feet, he started across the room.

"Just a moment." It was a sharp command. It came from the biologist, her husband. Steve turned in surprise. It was not Claiborne's usual unoffending manner, and his near-sighted eyes fairly snapped with determination.

"I, too, have objections," the biologist said harshly. "Like Dr. Clay. His reasons, however, were discreditable. Mine, I trust, are not."

The man was suffering, there was no doubt about that. His lips twitched incessantly as he talked, his forehead was

white and clammy. But his voice was strong, steady: "I loved Clara; God knows I love her still. I'll never love another woman as long as I live. But I am thinking of that new world of your dream. That dream is mine, too. I am a biologist; I have done some modest work in heredity. I know how important it is to have sound stock. Environmental influences play their part, no doubt, but the basic factors in rearing a new race are the genes inherent in the parents. Clay was right, though his motives were petty. If we are not to make a farce of the entire scheme, we must start right here and now to pick and choose with care."

His eyes went to the still form of his wife, clung for a moment, and tore away again. "Clara is a beautiful woman. I do not regret having married her. I would marry her again if the opportunity arose in the world as it had previously been constituted. Don't ask me why. Love, I suppose, is like that—reasonless, senseless. But I am looking to the future world, not to the one we have just quitted."

His voice dropped. "Clara has none of the qualities the new race desires. She is selfish, vain, empty-headed and brainless; she is greedy and petty; she never had a kindly, generous thought in all her life. She is incapable of love in its true sense. She primps and dresses all day long to make herself more beautiful and attractive to other men. She would be without question a subversive, damning influence in the world you are trying to evoke. I beg you, Dodd, let her sleep on, quietly, peacefully, until—until—" He choked and stopped short. His voice had grown hoarse with struggle. He was suffering terribly.

The strange drama of this soul in torment held them speechless. Steve felt a vast ache of pity for the man. Everything he had said was only too damnably true. Clara Claiborne, awakened, would

set even their little circle by the ears. It had almost happened during the days of stress and fear before the coming of the nebula. What could not take place now? Hanteaux was obviously enmeshed, and he had not failed to note Clay's raking glance.

And it was Hanteaux who flared up, his voice growling in his beard, his shoulders shrugging with excitement. "What manner of a man is this husband, *hein*? He talks of genes of inheritance, of a charming woman's pretty vanities, and behold—she must die. What does a woman need with brains to addle her lovely head? What matter these petty vices he proclaims from the house-tops? Woman has fulfilled her function when she is beautiful and desirable. I demand, Monsieur Dodd, that she be awakened."

"And I demand it also," Dr. Clay joined with dry malice. "We must all remain good married men."

Steve looked indecisively to Gardner. Claiborne had been right, only too right. But— The astronomer smiled quizzically, and said nothing. His eyes were bright with interest.

"You must awaken her," Deborah said quietly. "She was one of us, from the beginning. That is part of the bargain. And I know, if you took Mr. Claiborne's word for it now, he would be the most miserable and unhappy man in all the world to come."

The biologist staggered to a chair, and sat there with face buried in his hands. Steve said grimly: "Very well!" and picked up the hypodermic again.

XII.

LATE that afternoon they ventured out into the silence of the city. All that is, except the children, who had been left under the motherly care of Mrs. Clay. No one had said a word to her of her husband's protest, and he had accepted, calmly and coldly as ever, her

tearful adoration when she had arisen from her stupor. Claiborne's dramatic plea had not been mentioned either. But Hanteaux whispered indistinguishable things into Clara's ear as they walked along.

Prepared though they were, the awful reality far exceeded any anticipations they could have formed. The city of East Haven, once a teeming mart of life and movement, was now a silent jumble of buildings in a dead world. The streets were carpeted with pathetic bodies, thick strewn like the leaves of autumn, even as they had fallen in that dreadful moment when the nebular molecules had lanced through earth's atmosphere like driving bullets.

Everywhere they were—men, women, children, old and young, those whose clothes proclaimed them rich and prosperous with earth's goods, and those who toiled and labored with hard, rough hands in ditches and restaurants and factories. And on all their faces, sightless, staring in huddled blankness at an unfeeling sky, was the calm of those who never more would wake.

It was an eerie feeling, picking their way through the sprawl of bodies. To know that these were not yet dead, that two months would pass before the wasting of flesh through non-nutrition would bring ultimate dissolution, to know that they had it in their power to bring these sleeping beings back to normal life, like that kiss in the fairy tale on the slumbering lips of the princess—these were thoughts that awed and disquieted them more than they cared to admit.

A hundred times Deborah, her woman's heart squeezed with pity, turned impulsively to Steve, but he shook his head with grim, set features. He could not afford to be pitiful.

There were scenes of dreadful horror, too. Autos and street cars and huge lumbering trucks whose drivers had been stricken with the nebular paralysis and had slumped forward on the

wheels. Juggernauts of destruction whose crashing, unrestricted progress had left bloody trails of maimed and mangled bodies behind until sidewalks and walls and lack of fuel had stopped their insane careenings. The factory chimneys were dead; not the tiniest thread of smoke curled through the lazy air.

It was over eight days since the cessation of life. But there were sections of the town where untended fires had stirred into flaming wrath, and ravaged without let or hindrance for days. Whose quarters were heaps of charred and sooty ruins. God knew how many human beings, insensible to heat or pain, had been immolated in the fiery furnaces.

But the deep silence was perhaps the most dreadful sensation of all. The silence and the utter lack of movement. Not even a dog or a cat scurried through the deserted streets at their approach; not a bird winged its way through the sun-filled air. A thin layer of dust covered asphalt and stone and human flesh.

"To think," muttered Dr. Cunningham with a little shiver that went rippling over this rotund body, "that we are the only ones alive in the entire world—the solar system, perhaps. To think that this scene, with all its implications, is duplicated in a hundred thousand areas, from polar snow to tropic jungles. It's—terrifying!"

Dr. Clay stopped suddenly short. He was bending over the body of a young girl, beautiful even through the disfiguring layer of dust. Her eyes were wide with appeal—as though she saw them, as though she implored their aid.

His pale face suffused with blood. "Here's some one to be awakened," he said thickly. "Beautiful, clean-limbed. We need women like her."

But Steve held his face averted. He must not show the others what a struggle it cost him to drive through with

his plan; how each individual, lifeless form he passed literally cried for resuscitation.

"Not now," he said harshly. "I have only a limited supply of the antidote. It must be saved for those whom we know personally to be valuable additions to the new world to be. Later, when more is manufactured, we shall see."

He was glad when they reached the observatory. Deborah was white and silent as they entered. She was trembling in every limb from the pitiful sights she had seen, but she held herself tight. Steve's plan was the only way. They must be ruthless and merciless if it were to succeed. But, oh, it was going to be terribly hard!

Within the vast rotunda they found a dozen men, seized in the midst of their labors with the deadly stupor. Friends of Gardner, intimate coworkers.

Steve saw the quiver on the astronomer's lips as he stared down at these men he had known and loved. "Before we rouse a single person," he stated quietly, "we must organize our plan of action. The first move as I see it is to obtain the necessary supplies for new batches of the antidote from Kungesser's. Suppose we let Clay and Cunningham handle that. George knows just where they can be found. The second move is to decide just whom to inject with what we have on hand. It will take over four days before the additional supply will be ready. Any suggestions?"

GARDNER tore reluctant eyes away from his sleeping colleagues. "Every one of these men—with the possible exception of Horne, the assistant chief, who was forced on us by the donor of the observatory—is extremely valuable. They are scientists in the true sense of the word, men of high ideals and characters. But"—and his face twisted painfully—"we must be realists. Just at present we cannot afford a top-heavy

list. We must balance our group; otherwise we shall not be able to survive long. Too many astronomers would be superfluous. There are men here who are more profound in the science than I am. God knows I would gladly have you waken them and put me back to sleep."

Deborah ran to him, put her shapely hand over his mouth. "Don't you dare talk like that," she scolded. He smiled wanly, disengaged her hand. "It's a terrible thing to do, but I'd suggest at least for the present that you inject only Morehouse, the spectroscopist, and Ackley, in charge of stellar photography. And, oh yes—another man." He searched the rotunda for the figure he desired. "Come, I know where he is." They followed him in silence into the cellars of the observatory, where the machinery operated that activated all the delicate precision instruments above.

He found him at last, a grimy, oil-stained, lanky individual in still grimmer, nondescript overalls. He lay on his side, half facing a huge, shiny motor, an oil can still clutched in frozen fingers.

"This," Gardner declared, "is Jimmy. I never heard his last name; perhaps he was born without one. But he is an electrician par excellence. There is no machine powered by current that he cannot repair; there is no electrical gadget he cannot make. I believe he quit school in the sixth grade. He reads by spelling out the words aloud, he is wholly superstitious, but he'll share his last dime with the first bum he meets. I think, Steve, he'll be more of an asset to the new world than any number of high and mighty scientists."

Steve grinned, then said seriously. "You're absolutely right, Gardner. I'd almost forgotten that we need the humble as well as the intellectually proud. The hewers of wood and drawers of water, the farmers and ditch diggers, the mechanics and truck drivers. And just now, we need them even more. So

Jimmy will have the honor of being the first of the new era, besides ourselves, to return to the scheme of things."

It took two full days before the supply of antidote was exhausted. It had taken considerably more in energy and wrangling and dissensions among the steadily growing group. Clay had violently opposed the rousing of Banton, acknowledged as the world's greatest authority on glandular secretions. "He is a charlatan, a braggart, whose work is superficial and along radically wrong lines," he exclaimed vehemently, as he stared with hostile eyes at the slight, gray-haired figure slumped over apparatus in the immaculately neat laboratory on Dawson Street.

But Dr. Cunningham took Steve aside, and explained in a low voice. Clay had always been jealous of the other's overshadowing fame; Banton's work had been fundamental compared to his. So Steve disregarded his objections and roused the man. Little lights smoldered in Clay's eyes, but he said nothing aloud. It was noticeable, however, that he kept to himself a great deal after that, repulsing even the timid advances of his wife.

There were other highly disturbing cases, too. As men, scientists, mechanics, aviators, were brought to blinking life, inquiries were instituted of them as to others known to them in their particular fields, as fit material for the new order of things. Too often it was discovered that their judgments were warped by envy, hatred, rivalry—the very qualities Steve had tried desperately to eliminate from his picked band.

Just as disturbing were other signs which boded ill for the perfect state he was attempting to evolve. Wherever possible, he had made it a rule to join wives to their husbands, and children to both, arguing that thereby family units would be continued, and real happiness would have a better chance of survival. But certain very remarkable

facts were soon evident. Notably, that a good many elderly, wrinkled scientists were possessed of remarkably young and beautiful wives. Wives who on awaking did not seem to recognize the husbands who claimed them. This, remarked the embarrassed husbands involved, must have been due to some strain of amnesia produced by the nebular gas. It was also remarkable to note the number of elderly, plain-featured women who, though discovered in the homes of these distinguished scientists, were disavowed hastily as mere servants. Their wives, strangely enough, were to be discovered elsewhere, and just as invariably were good to look at.

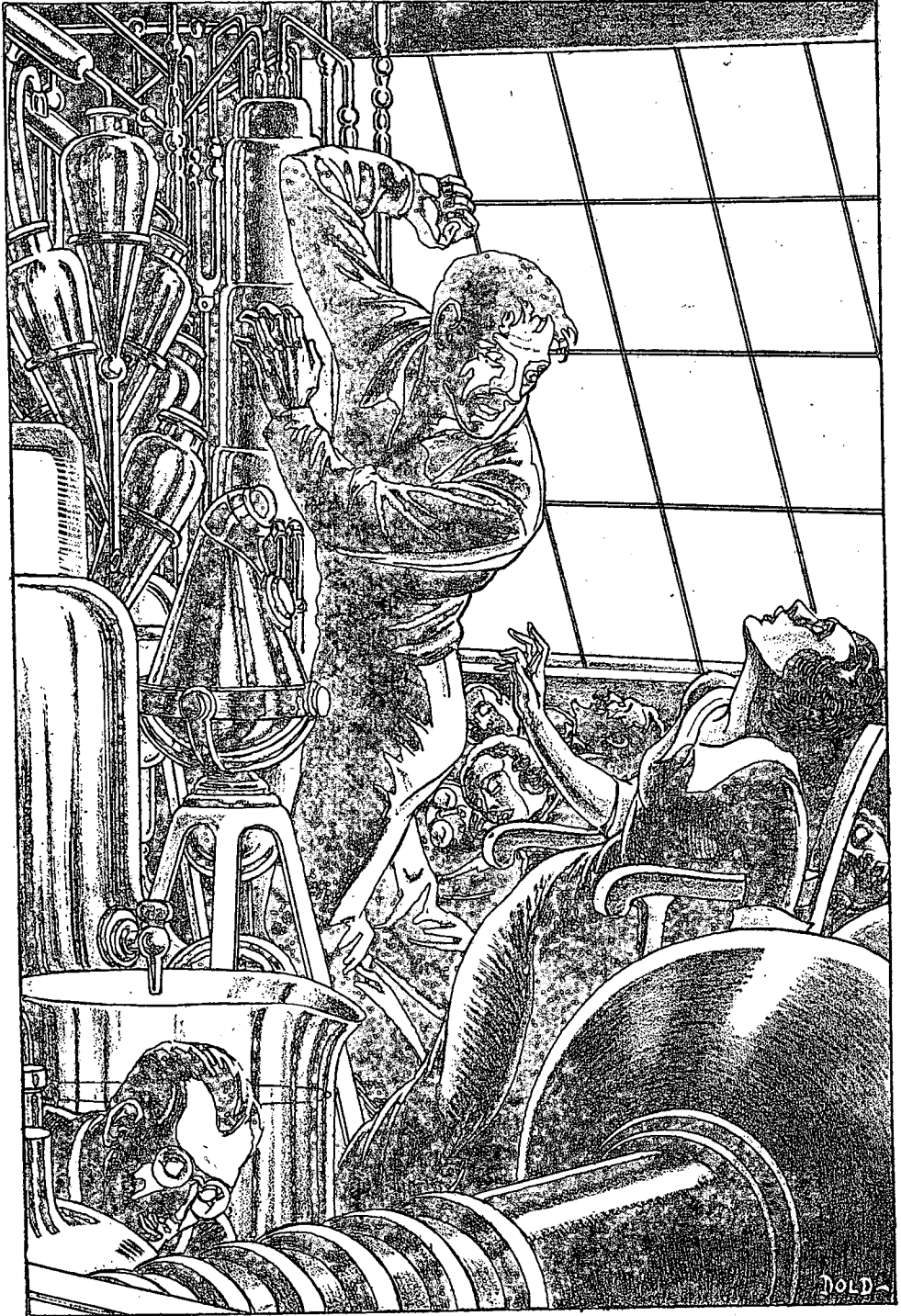
The matter came to a head when Wickersham, the oil expert, parading through an abandoned street with a certain young and lovely thing who had not recognized him at first, but now, after sundry private conversations, had avowed him as her lawful husband, was confronted with a small party of newly aroused people under escort of Claiborne from a different section of the town. A powerfully built youngster whose garb proclaimed him as an aviator, broke ranks with a shout. At the sight of him the young girl thrust Wickersham's arm away with a violent gesture, and rushed headlong into the aviator's arms.

"Dick!"

"Alice!"

WICKERSHAM attempted to bluster it out. But the upshot was that he received a very neat and thorough trouncing at the hands of the enraged real husband, while Claiborne stood thoughtfully by, making not the slightest attempt to interfere. When it was over, Wickersham was a pitiful sight, and had to be carried back to his unit. The young aviator and the girl, married, it was soon established, only a month before, walked joyfully away,

I AM NOT GOD



Steve's hand made a fist as it raised in the air—and there it froze.

wholly wrapped in each other. To add to the oil expert's tribulations, it was hastily decided in conference that evening to arouse the so-called servant in his apartment.

"Let his wife take care of him," Steve said grimly. "I sometimes wish," he went on, "I had the callousness to put some of these men back to sleep again."

"It wouldn't matter much," Gardner remarked. "You'll find that no matter how much you pick and choose, there will always be mistakes."

"There may be," Steve admitted. "But," he went on confidently, "there is no question that so far, in the five hundred from East Haven alone, we have immeasurably raised the average from what it had been before the nebula."

Gardner shrugged his shoulders in a queer gesture, but made no further comment.

There had been one very ugly incident, however. Fortunately, it had been the only one. The others were more in the nature of farce-comedy and mere pettinesses than anything else. This was stark tragedy. The matter of choosing men to be brought to life was simple compared to the devious intricacies when women were involved.

Wives, of course, were given preference, and on the whole their problems were satisfactorily solved, except in such instances as Wickersham's and others of his stamp. But when it came to unmarried women the difficulties increased a thousand fold. It had been decided in advance to awaken approximately as many as there were unmarried men, so as not to have a superfluity of either sex. But the men's judgments could not be relied on. They almost invariably wished to pick by beauty of face and body, rather than by mental and character tests.

The women, on the other hand, were just as obdurate in proclaiming every sleeping girl whose features were in the slightest degree attractive as an empty-

headed nincompoop. Given their way, the ranks of the women would have been augmented by a bevy of plain-featured, unattractive ladies. The uglier they were, the more votes were cast in favor of restoring them to life.

There was one girl, however, whom Deborah recognized as a classmate. This girl, Deborah told Steve excitedly, had captured every prize at college. She was brilliant, a research student in economics; she had been voted the most popular girl in the class because of her charm and essential kindness and finely tempered character. And, quite obviously, as they found her in her little furnished room, she was of surpassing beauty.

Hanteaux sucked in his breath sharply through his black beard. His eyes sparkled with avid desire. He moved quickly away from Clara, on whom he had hitherto danced constant and devoted attendance, while Claiborne had watched their antics with somber, inscrutable gaze.

"But certainly we must awaken this little pigeon," Hanteaux said greedily. "She is—ah!" His eyes rolled, his hands made an expressive gesture.

Clara turned white with fury under her rouge. She stamped her foot. "We'll do nothing of the sort," she almost screamed. "She looks to me to be a hussy, a person without—uh—morals." This from Clara Claiborne partook of high comedy, but she was too furiously jealous to notice any inconsistency in what she said. "There are plenty other women, far better than she, who are still asleep."

But she was overruled, unanimously. Even those more elderly ladies who had sided with her before in such little matters were convinced by Deborah's pleas. The men of course were a unit. Hanteaux's gaze never left the silent, sprawled body. Not once did it shift to Clara.

Unfortunately Steve had exhausted

his traveling kit of antidote. It was necessary therefore to return to the laboratory for the scanty remainder of the precious liquid. The others scattered on assigned duties. When Steve returned, with Deborah, tragedy stared up at them with ghastly countenance. A long bread knife quivered in the bosom of the girl they had come to arouse. Little beads of blood oozed around the edges of the steel. Her sleep had shifted to eternal death.

The affair aroused great excitement in the little community. Steve, grim-eyed and stern, convoked court. "This," he declared, "is brutal, callous murder. The murderer is one of us. It is imperative that he, or she"—it was remarked how he hesitated on that change of sex—"be discovered and ruthlessly punished. Our new world must be free of all taint."

Suspicion was naturally cast upon Clara Claiborne. But proof of her guilt was another matter. She vehemently and indignantly denied all knowledge or complicity. The handle of the knife had been carefully wiped clean of fingerprints. Henry Claiborne arose in the impromptu court, to state calmly and clearly that he had left the scene where the tragedy was to take place, in the company of his wife; that from that time on, she had never quitted his side; that they had spent the period in examining the stock of Kungesser's for certain supplies. No! No one else had seen them in Kungesser's.

Claiborne was known to be a man of unimpeachable honesty. His word must therefore be accepted as final, albeit reluctantly. Every one knew of the affair that had existed between Hanteaux and Clara. So that Clara, sobbing copious tears, was freed. Nor was the crime ever legally solved!

After the trial, Gardner said abruptly to Steve: "Poor Claiborne! He still loves that vicious wife of his." And

turned away before the young chemist could reply.

By the tenth day after the great awakening, the community had become somewhat organized. The five hundred men, women and children, an oasis of life in a world of sleepers, were divided into companies and squads under the driving compulsion of Steve's flaming genius. He didn't spare himself. He had hardly slept through the entire period. There was so much to do, and little time in which to accomplish it. It was a mad race with time. At the end of the twentieth day, he knew, the almost imperceptible processes of metabolism would begin to show effects. It was approximately that since the nebula had passed through the earth. Within another month it would be impossible to bring them back to life.

XIII.

EVERY ONE had a specific task to perform. No one was exempt, not even the children. The first and most important duty had been to manufacture a new supply of the antidote. Steve had taken personal charge of that, and now he had sufficient units of injection for almost a hundred thousand resurrections. A new batch had already been set into operation.

The second vital task was to bury those who were irremediably dead. Fortunately, the nebular gas had laid bacterial forms under the same trance as the higher animal life, so there had as yet been no pollution and disintegration. The sleepers of course, being as yet alive, would not decay. But as human beings were awakened, their bacterial parasites sprang also into activity, and it would not take long for the contagion to spread from East Haven as a focus. Accordingly, a considerable squad worked unremittingly at the arduous and loathsome task of seeking out and burying the unmistakably dead.

Scientists for whom at present there were no particular set duties toiled side by side with mechanics and honest long-shoremen.

The food problem came third. For the present it was an easy one. There was a sufficient supply in the homes and warehouses of East Haven for their purposes, but Steve was looking ahead. Those few who professed a knowledge of farming were sent to the neighboring fields to take care of the lush crops that had been growing untended. He even had used some of his precious units of the wine-dark liquor to restore to life carefully selected cows, hogs and chickens.

It must not be believed that all this activity went through without a hitch. There had been grumblings and much resentment among a certain few. There were even mutterings of dictatorship and tyranny. But Steve held the whip hand. They all owed their lives to him; the great majority of the five hundred were all his devoted followers. Gardner, Claiborne, Cunningham, Kuntz, followed him blindly and unquestioningly. Deborah was adored by the women and held powerful, albeit invisible strands of influence over the men. Even Hanteaux, whom Steve had found it necessary to admonish sharply on more than one occasion, was loyal and a good worker. He was weak only where women were concerned.

But Clay brooded apart, saying nothing openly, but appearing invisibly at the bottom of each little whirlpool of discontent and disturbance. And Clara Claiborne was openly a seething volcano of hatred. Her husband avoided her, even in public, after his notorious alibi in her favor. His speech had become more and more clipped, and he threw himself into his work with a passionate fervor that argued a desire for the obliviousness of physical fatigue.

Meanwhile fast planes were being put into repair. With a hundred thousand

units of the antidote on hand and more on the way, revivification need no longer be confined to East Haven. There was the whole world now to be considered.

The matter was the subject of an extended and exacerbated conference to which every one was invited. Steve made an impassioned introductory speech, restating his aims and ideals for the new humanity they were in the process of forging. He brought calculations and charts to bear with great skill. They had been prepared by Claiborne, as an authority on inheritable qualities, in conjunction with Stoddard, the anthropologist, and Behr, the statistical economist.

They tended to prove that not more than a thousandth part of all the earth's people were possessed of the genes of inheritance and the necessary environmental conditions for a superior race.

"That means," Steve explained, "that out of a billion and a half dwellers on the earth, about a million and a half are good, sound material for the new race. No one country, no one race, no one nationality of religious sect holds a monopoly or preponderance of this available stock. The studies are rather conclusive on that point. The distribution seems to be remarkable even."

"We must of course make exceptions of the bushmen of Australia, of certain indigenous tribes in the interior of Africa, of certain degraded Indians in the Brazilian jungle. They will have to be left out of the picture, and also certain other sections of the world, more from a lack of ability to discriminate than because they have not good potentialities."

"But I think," he went on, "we ought to be rather ruthless. I'd advocate picking and choosing not over half a million. The task will be gigantic as it is. The mere searching out of these men, women and children over the far reaches of the earth, the mechanical transportation required and the innumerable injec-

tions of the antidote will bring us perilously close to the dead line when their present life-in-death will have merged with the irrevocable sleep of eternity.

"God knows," he proceeded grimly, "that many, far too many mistakes will be made. We are human beings, with finite limitations. We cannot open the sleepers, like dissected animals, to see what they are like. It will be essentially a hit or miss affair. We must proceed from those who are nationally and internationally known for definite worthy achievements to the vouched-for acquaintances of those whom we awaken. The circle of contacts will spread thus like the ripples from a stone thrown in still water until it embraces the whole earth."

THEN started the wranglings. His statistics were questioned and defended. Religious divisions reared their heads. Catholics hinted that they were entitled to a rather greater proportion of the saved, inasmuch as they were already of the elect. Certain Fundamentalist Protestants were even more vehement that Popishness in itself should be a ground for dismissal from the ranks of humanity. While a Jew tried to prove by picked quotations that at least one out of every ten of his race was intellectually superior.

But the religious squabble was a mere flurry compared to the nationalist rancors that sprang vociferously to the fore. It was started by Jimmy, the electrician from the observatory. He was, he said, a hundred per cent American. His father had been a Swede and his mother Scotch-Irish, but that did not matter. Why bother with foreigners, he demanded? They were a filthy lot; they ate strange foods and wore peculiar clothes, they were always fighting among themselves and unanimous only in doing Uncle Sam out of the money they owed him. There were more than half a million honest Americans right here at

home who exceeded in quality ten million foreigners. "Let's stick to our own kind," he finished shouting, "and you'll be having a world that is a world."

Armand Hanteaux was on his feet instantly, coldly furious. "I am," he remarked icily, "one of those pigs of a foreigner to whom this Jimmy alluded."

"I say," Jimmy expostulated, the scarlet creeping through the everlasting smudge on his cheek bones. "I ain't been referring to you, Mr. Hanteaux. You're all right." It happened that a rather strange friendship had sprung up between the two, seemingly so far apart in every respect.

But Hanteaux was not to be appeased. He rose to heights of Gallic eloquence, and ended up by proclaiming the French race to be the Gallic salt of the earth, that civilization had initiated and reached its ultimate fruition in *la belle France*, that it was an oasis of light surrounded on all sides by howling barbarians, that he personally knew at least a million compatriots who must—and he glared at Steve—"who must, Monsieur Dodd, be brought back to life."

Thereafter there was bedlam. A half dozen nationalities were on their feet, clamoring for special recognition of their kind, indignant in repudiating the absurd claims of the others. Faces became distorted, passions rose to fever heat. It would not have taken long for the argument to have passed the wordy stage.

Steve thrust himself into the fray. His clear, smashing voice beat down the babel, brought a gradual cessation of the noise.

"So you," he said sarcastically, "are the elite, the chosen few of East Haven, picked under the closest supervision and with personal acquaintance of your abilities and achievements. If in this select group such narrow, distorted arguments can be vented, what will happen when we arouse even half a million?" His voice rose to a thunder.

"I sometimes feel that my whole plan is futile, that the human race is doomed to extinction because of certain inherent, ingrained qualities from which even the best of us are not entirely free. Perhaps"—and there was now a hush over the flushed combatants—"it might have been wiser not to have awakened a single individual, to have left the earth free at last from the loathsome corruption called life. But, being a hopeless optimist, I am willing to concede that this emotional outburst did not represent the real you; that it has already passed, and that you are heartily ashamed of it."

Jimmy's voice came small and confused. "It's me that started it all, and I ain't feeling too good about it. You know; I'd clean forgot about Mr. Hanteaux being a foreigner. He's a pretty white guy at that."

A roar of laughter swept the rotunda of the observatory. And with the laughter came a cleansing gust of feeling. Once more they were a unit, a common humanity. The resolutions were carried with acclaim.

The next day a dozen planes roared up from the flying field, to scatter to the four corners of the earth. Each held two men—a pilot and a scientific observer to whom had been given power of life and death over certain specified areas of the earth. The hundred thousand units of antidote were divided exactly and apportioned among the planes. Instructions were rigorous. Guesswork was to be eliminated as far as possible. Scientists, artists, writers, men in public life, mechanics, farmers, lumbermen, were all to be chosen from personal knowledge and inquiry.

Men, women, and children to be aroused in certain definite ratios to make for a well-balanced world. The scientist observer to establish in each area a form of government with himself at the head, patterning after that in East Haven, which was to control the United States east of the Mississippi. He was also at

once to gather in his section the materials for making the antidote and to manufacture only the definite amounts required to revive the allotted number, as well as a sufficiency of domestic animals and a certain percentage of wild life.

The planes took off amid a storm of cheers. The entire community was there to see them go. Within a few days the isolated group of five hundred would no longer represent the sum total of mankind. A half million of their fellows would rise from their slumbers and join them in the new world. It was an awe-inspiring thought. What would they be like, these newcomers, what manner of civilization would they evolve? Something of the spark of Steve's driving enthusiasm infected them all. Lumps rose in their throats. Deborah, clinging proudly to Steve's arm, blinked back the tears from her eyes. Only Gardner, her father, seemed a bit reserved in his attitude.

THE LAST PLANE was gone, a fast disappearing speck over a lost horizon. The community started to go back to their tasks. There was a general let-down feeling. Then they stopped short. Another plane had risen from somewhere on the outskirts of the city. It went hurtling upward, gaining altitude all the time. Then it swung out over the Atlantic. The roar of its multiple motors beat down upon them with insensate sound, became a rapid diminuendo as the plane picked up speed. There were two occupants, but it was impossible to determine who they were.

Deborah turned to Steve. "I thought all the planes had gone."

He nodded. There were worried lines on his forehead. "They have," he said slowly. "That wasn't one of our planes. It's an outsider. Is it possible that some one else managed to survive the nebular gas?" He raised his voice suddenly. "I

want every one to return to the observatory at once—every one, please.”

They huddled into the vast rotunda, wondering, questioning. Steve was obviously upset. This strange plane—what did it portend? But Steve did not answer questions. He was calling the roll of the little community, checking them off carefully as they answered. When it was over he took a deep breath. His face was hard and set. “We are all accounted for,” he said, “except for two individuals. They are—Dr. William Clay and Mrs. Clara Claiborne.”

A long murmur of understanding went up. Fortunately the deserted husband was even now winging his way to the Chinese sector as scientific observer.

“If it were a mere elopement,” Steve went on grimly, “I’d say good riddance. They both were malcontents, and did everything in their power to stir up trouble among us. Sooner or later we would have had to deal with them. But I’m afraid that this running away has more to it than appears. It has evidently been carefully planned. Clay must have found a plane somewhere in his scoutings and fueled it secretly for this voyage. What is his destination, and what did he take along?”

Gardner rose quickly. He whispered something into Steve’s ear. The latter nodded. “I’m afraid of that myself,” he returned in a low tone. He raised his voice. “Now please, every one, back to your duties. They are many, I know, and arduous, but they must be done. In the meantime Gardner and I have some investigating to do.”

Half an hour later the two stood silently before the wreckage of Steve’s laboratory. It was a thorough job. Every bit of apparatus in the place had been smashed to a thousand pieces. The tank in which the antidote was prepared lay in a million jagged shards, and the precious materials—the radium salts, the lutecium and scandium, were gone.

This was bad, but not irreplaceable. It could not be compared for tremendous consequences to what had taken place in Steve’s inner sanctum, the closely guarded and intricately locked laboratory in which were stored the apparatus and equipment for manufacturing the lethal pseudonebulium.

The door had been smashed in with heavy crowbar, and the laboratory itself was a shambles. Metal parts were twisted scraps, the De Graaf machines were battered into unrecognizability, and the secret drawer in the desk, where Steve had kept his plans and formulæ, had been rifled and the papers gone.

It was this more than anything else that whitened their cheeks as they stared at each other in stunned silence.

“He’d been plotting this for a long time,” Gardner finally said.

Steve smiled mirthlessly. “I should have destroyed the plant myself a long time ago. But I required supplies of the pseudonebulium for experimental purposes. Now——”

“Within the time necessary to build the requisite apparatus from your plans Clay will have the world at his mercy,” Gardner finished soberly. “The new world of our dreams will prove more horrible than the old reality.”

Steve ridged his jaw into hard knots. He moved rapidly toward the door, without even a backward glance at the wreck of all his hopes.

“Where are you going?” Gardner asked in alarm, hurrying after him.

“To put a stop to Mr. Clay and his innamorata,” Steve shot back, not slackening his pace.

Gardner’s wind was not very good. He had a hard job keeping up with the younger man’s long, purposeful strides. “But you don’t know where he went to,” he panted.

“I have a pretty good idea.”

And with that, perforce, all of them

had to be content. Steve hurried to the observatory, and within seconds the whole community was moved into frantic action. Scouting autos dashed out over the roads, radiating from East Haven. Tins of gasoline were rushed to the flying field, supplies flung into a heap in record time.

Within two hours exactly a plane thrummed out of the inland, and deposited lightly on the level ground. Dick Mansfield, the young pilot, whose wife the oil expert, Wickersham, had attempted to claim as his own, climbed out, a broad smile over his blond countenance.

"I found a beauty, Mr. Dodd," he said eagerly. "Standing in the Aero Company's hangar at Westfield. She'll do eight thousand miles without refueling, and I tested her before I got her started. All tuned up, r'aring to go."

"Good!" Steve snapped. "Now get everything on board, supplies, everything. Fill the tanks, load the rest of the tins in the fuselage. And don't forget that." He indicated a machine gun that rested on its side, a little apart from the rest of the luggage.

Dick Mansfield face lighted up. "So that's it, eh?" he breathed. "Listen, Mr. Dodd, you've got to take me along. I know how to handle that baby, and I can fly planes—plenty."

Steve looked him over briefly. "O. K.," he said. "And Jimmy!"

The lanky electrician, grimy as ever, slouched over slowly. He avoided Steve since his hundred per cent speech had had such unfortunate consequences. He touched his oil-stained cap with a timid fingers.

"Yes, Mr. Dodd."

"Know how to handle a gun?"

A broad smile spread over Jimmy's dirty face. "Say, you don't mean——"

"I do, Jimmy, that is, if you want to come along. It'll be hard, dirty business."

"Can a duck swim?"

XIV.

THE TRIP across the ocean was uneventful. As they neared the shores of Europe, some fifteen hours later, Mansfield leaned back for further instructions. "Where are we supposed to land?" Not even to his companions had Steve as yet disclosed his destination.

"Pergonia," he said shortly. He was rewarded with a whistle of surprise from his companions. Pergonia was the newly established capital of the War Lord!

"Jumping catfish!" Mansfield exploded. "You don't think that's where Clay and his frail were headed to?"

"If they weren't, I've been badly mistaken," Steve answered grimly. "How much ahead of us do you think they are?"

Mansfield scratched at his head with his free hand, forgetting the leather covering of his flying helmet. "It all depends. Clay much of a pilot?"

"Had his own private plane."

"In that case I'd say about seven hours. They had a good wind on their tail all the way, and we've been running into some cross currents quite a bit."

"Seven hours," Steve repeated. Seven hours was a long time. Much could be done by a determined, revengeful man in that period.

They were flying past the coast now. Holland, Belgium and part of France spread like a variegated carpet beneath them. No sign of life anywhere. One vast, interminable desolation. No smoke, no railroad trains crawling like long caterpillars over the landscape, none of the signs of activity that were normal even from the height they were traveling.

Of course, Hanteaux had not started his job yet. How could he know the desperate need for hurry? Like any scientist, he would first land, set up his laboratory, gather data. Then he would

AST-9

commence bringing back to life those whom he knew personally. Scientists chiefly, which was only natural. It would take a deal of time to ferret them out. There would be explanations, further inquiries. A slow, tedious process. Such too would be the course of procedure in Germany, where Kuntz had gone. Ironically enough, the territory of the War Lord was included in his sector.

A quick spasm of anxiety pulsed over Steve. Kuntz did not know, could not know of the calamity that was so close to him. Hanteaux, too, and the others, must be told, so that they could speed their work, take measures for their safety before it was too late.

Fortunately their plane was equipped with a broadcasting unit. So were most of the others that had departed. Steve turned to Jimmy, gave him swift instructions.

"O. K., Mr. Dodd," replied the electrician. His expert fingers worked rapidly at the apparatus. Their recognition signal surged out into the ether, crackling and sparking, over and over again. There was no answer. Jimmy puckered up his dirty forehead. "Either they're not near their planes, Mr. Dodd, or else—"

Steve broke in hurriedly. "That must be it, Jimmy." He did not want to envision the other possibility. "Send out the warning anyway. Repeat it every five minutes. Perhaps it will be picked up."

They had swung to the east now. France was behind, Germany overrun. They were flying steadily and swiftly. Steve sat with hands tightly clenched. They must get there in time, before Clay could make a good start on his traitorous work. Clay, in his thirst for revenge against the men who had snubbed and slighted him—according to his hate-twisted mind—would nevertheless have realized he was impotent without help.

AST-10

The apparatus for manufacturing pseudonebulium was complicated, and required expert assistance and considerable resources to construct. There was only one place in the world where he would find such skilled assistance and the peculiar type of mind that would fall in with his plans. The realm of the War Lord! So, at least, Steve thought Clay had reasoned. Especially when Clay had known how desperately anxious the War Lord had been to possess himself of the secret. It was a gamble of course, trying to trace the workings of another man's mind, but it was Steve's only possibility, and he was staking everything upon it.

"We've just crossed into his territory," Mansfield reported.

"Keep high," Steve ordered. He looked over the side. Far below were a series of thin, zigzag lines, stretching away on both sides as far as the eye could see. Trenches! Filled with soldiers huddled together in the deathlike coma. Guns were down there too, great engines of destruction. A seemingly peaceful, monstrous graveyard. Ready at the prick of needled syringes to awake in stark bewilderment, yielding shortly to the passions and hatreds that had animated them before the great sleep. Then once more the guns would belch and the tanks lumber and the siege guns vomit express trains of hurtling death. And if only the soldiers of the War Lord were awakened— Steve shivered.

"Pergonia!"

THE CAPITAL CITY lay like a jigsaw puzzle beneath them. It was newly constructed, highly modernistic, with broad blocks of masonry, thick as fortresses, and wide squares from which long, unimpeded highways radiated like the spokes of a wheel. Everything had been subordinated to military efficiency. A groan burst from Steve's lips. There was movement far below. Thin trickles of smoke were beginning to curl up into

the air from a dozen factory chimneys. Men were massing in the huge central square. Mere blobs of movement! A single buglike automobile dissociated itself from the mass, moved at what seemed from their height at a snail's pace. Another, and another. The War Lord was wasting no time!

Steve could tell just what had happened as though he had been present. Clay had driven directly for the War Lord's palace. He had brought him back to life, under certain precautionary conditions. He had made his proposition, and it must have proven attractive to the War Lord. An agreement must have been speedily arranged. Together they had gone in search of the unsuspecting Herr Kuntz. The meek little German and his pilot must have been killed or captured before they had a chance to resist. Their supply of the antidote was seized. Already a considerable number of the troops had been revived, and the balance of the precious liquid was even now on its way to the front. It would be a comparatively simple affair to bayonet the enemy troops as they lay entranced in their trenches.

The next step would be to overwhelm the other scientists, Hanteaux, Cunningham in England, and seize control of the world. A sleeping, deathlike world. What they intended doing after that, Steve could not fathom. Perhaps they would awake select portions of mankind, picked this time for amenability as slave material; perhaps ruthless destruction was to be ordered, and the entire world colonized with docile subjects of the War Lord. They bred like rabbits. As for the solitary community at East Haven, a few bombing planes would take care of that. And the secret of the manufacture of pseudonebulium—

Steve was sure Clay would never give that up. It was his weapon for controlling the greed of the War Lord. He would manufacture it, yes, but he would be a fool to disclose the process.

"Get down close to that line of factories," Steve ordered.

Mansfield blinked and banked into a steep dive. Already they had been spotted. Little ants had left the central mass, were running frantically toward an open field, where a dozen fast pursuit planes were standing in serried rows.

Jimmy thrust a loving hand over the barrel of the machine gun. A slow grin spread over his grimy countenance. This was living!

Down, down they swept, the wind thrusting up against them in a furious gale. Steve crouched keen-eyed against the heavy plate glass window, trying to spot signs of Clay. Damn! If only he had bombs with him. He'd drop them on those factories from which the trickles of smoke were steadily getting straighter and heavier. Clay must be in one of them, supervising the production of the apparatus for the manufacture of pseudonebulium.

Closer and closer, in a headlong swoosh of atmosphere. Already some of the ants, now grown to dolls, were at the banked pursuit planes. In minutes they'd be taking off. They wouldn't have a chance then.

Steve thought of something suddenly. Mansfield heard him, and grinned. Jimmy positively chuckled. The plane swerved from its downward plunge, shot like a great bird of prey direct for the landing field. Down, down, until they were skimming over the surface, not fifty feet away. Jimmy swiveled the machine gun around. Its wicked muzzle bored through the interstices of the struts.

Startled shouts came up to them faintly. Some of the men below, sensing their purpose, had started running. Others, braver, were lunging into cockpits, trying desperately to get started before the thunderbolt was upon them.

Then Jimmy cut loose. It sounded like the spatter of dry hail on tin roofing. Around and around the field they

swung, while the machine gun ripped out burst after burst, raking the planes with remorseless fury. When they zoomed upward again, there was a deep silence beneath. Silence even as when the nebular gas had overwhelmed the world.

"I betcha," remarked Jimmy belligerently, "not a one of those babies will take the air for days and days."

No one took him up.

But this little victory was meaningless. They must find Clay, or else—

A vast ache of despair enveloped Steve. It was like finding a needle in a haystack. Clay might be in any one of those factories, he might be closeted with the War Lord, he might be in the front line trenches, supervising the resuscitation of the troops, he might be anywhere. Yet he must be found.

Dick Mansfield spoke up mildly. "We'd better be getting out of this place, Mr. Dodd. They are starting to shoot, and those hangars over there must be full of planes. I see autos scooting for them, jammed with men."

Little puffballs of white smoke exploded not a hundred yards away. Vicious spats of sound followed closely. Troops were debouching rapidly in their direction. Rifles sang their peculiar whine. And the antiaircraft guns were limbering up, with short, rapid barks. A tracer bullet scorched through their fuselage, almost set them afire. Jimmy looked anxiously at Steve, but said nothing. The place was getting pretty hot.

STEVE refused to give the order to turn and flee for the frontier. A desperate hunch held him to this one spot, even at the risk of death. Clay was here, somewhere below, the conviction hammered in his skull. Again they swung in a low, lazy circle around the now swarming terrain. A shrapnel shell burst over their wing tip. The plane rocked heavily. Mansfield had difficulty in righting her.

"I'm not a coward, Mr. Dodd," he flung over his shoulder as he gripped the controls with whitened knuckles, "but I don't see——"

Almost directly below them was a little copse. A clump of trees bordering a winding stream. The only shade for miles around. Steve was not listening to the pilot. He did not even hear him. All his attention was engrossed on the tiny figure that had stumbled out of the mass of trees and was gesticulating frantically upward in their direction.

"Land down there," Steve shouted to Mansfield.

"But look here——" the pilot started to protest.

"The order is to land and pick that man up," Steve barked.

"It may be a trap to get us down," Jimmy suggested diffidently.

But Mansfield was already losing altitude rapidly. They hit the uneven terrain with a jar, jumped heavily along before coming to a dead stop. The man came toward them on the run.

Jimmy cried: "For Heaven's sake!" It was not directed toward the fugitive. A body of troops had breasted the little rise not three hundred yards away. The morning sun glinted on their bayoneted rifles. Jimmy swung the nose of the machine gun around just as the first bullets spattered over them. He pressed the trigger with long, steady finger. The gun started to chatter, and a stream of steel missiles cut down the first spate of men as if they were ripe wheat for the sickle. The others flung themselves flat. Bullets whined and zipped. Jimmy grunted. A long sliver of steel sliced off the gun barrel, raked his left arm almost to the bone. "We'd better be going," he remarked.

But Steve paid no attention to the bullets, to their imminent danger. "Hurry! Hurry!" he was shouting at the fleeing man. He reached out a sinewy hand to grab him just as he staggered up to the plane, tottered and

was about to fall. With a powerful heave he pulled him into the cockpit.

"Now run for it," he screamed over the uproar to the crouching pilot. Mansfield did not wait for a second order. The motor roared into a crescendo of sound, bumped for agonizing yards along the hummocky ground, while the soldiers, lifting a great shout, had risen and were running furiously toward them, firing as they ran. Then, after interminable seconds, the plane lifted. Just in time, too. A sharp fusillade followed it as it went thrumming through the air. In seconds the troops were left helplessly behind.

For the first time Jimmy turned to see who it was they had rescued. His jaw dropped foolishly; he forgot the ache in his wounded arm.

"Mr. Kuntz!" he shouted unbelievably.

The little German chemist was panting heavily. He lay in the bottom of the cockpit, while Steve ministered to him from a flask of amber fluid. Finally he sat up, choking and gasping.

"Herr Dr. Clay is a traitor," he stutered.

"I know it," Steve replied grimly. "That's why we're here. But how did you get away from him? I can imagine the first part—how he captured you."

The meek little chemist shook his head mournfully. "Ja! I was in Berlin. It is where my home was. I see for myself great pleasure in finding my old comrades, and making them live once more. Then Clay come. I suspicion nothing. He is one of us. I start to welcome him, when a man in the plane commences to shoot. He kills Bailey, my pilot. Me, I was seized roughly, brought to Pergonia. Clay tells the War Lord I am good chemist. But in the excitement of that *verdammte* Clay going away, I run." He groaned. "Ja, how I run! Then I see the plane every one is shooting at. So I know it must be friend, and it is you, Herr Dodd."

"Where was Clay going?" Steve asked quickly.

The German turned toward him in surprise. "Ja. I almost forgot." He was going to find Herr Hanteaux."

"What?" Steve exploded. He swerved on Mansfield, bit off his words. "Paris! As fast as this plane can go!"

Back across Germany, over fertile fields and black-forested mountains they fled, while Steve kept urging Dick Mansfield to ever faster speeds, and Jimmy, his left arm bandaged, sent a steady stream of warnings crashing through the ether.

Herr Kuntz looked sadly down at the silent spaces of his beloved homeland. Munich, Dresden, Nuremberg, wrapped in impenetrable slumbers. While the antidote, thousands of units, with which he had expected to conjure up certain *gemütlich*, scholarly men and their comfortable, laughter-loving wives, was even now being used to manufacture troops, and more troops, for the despoiling of the frontiers.

And now the pleasant *pays* of France. Champagne country, waving grain, the Loire. But not a sign of life anywhere. The peasants lay where they had fallen in the fields, beat upon by torrid sun and washed by flooding rains. The carter's sprawled in the *estaminets*, the *vin rouge* dried into gummy pools near the still-open mouths that had gulped for the trickling pleasure. Workmen lay in dessicating similitude of life near silent machinery in the munition districts, the miners huddled in the dark, dank bowels of Lorraine.

XV.

OVER ALL the country was silence, changelessness, the contours of a dead world. Steve gulped back the lump in his throat. Hanteaux then had been captured or killed before he had a chance. It was a fast bombing plane, Kuntz had overheard, that was to take

Dr. Clay to seek out Hanteaux. Armed with rapid-firers, laden with stacks of detonite bombs, manned by a crew of ten. The French physicist couldn't possibly have had a chance, even if he had suspected Clay's mission, even if the frantic warnings that were winging the ether had reached him. Nor for that matter, thought Steve despairingly, would they have a chance against the bomber. Even their one poor machine gun had been put out of commission by that last bullet which had wounded Jimmy.

Yet still he kept driving Dick on to more furious speed. It was suicide, it was impossible to be of any use, but Steve held to the course. Better to die this way than to survive as slaves to the War Lord. He thought of the cold hatred he had once seen in Clay's eyes, and smiled mirthlessly. There would be no mercy for him, Stephen Dodd.

Dick Mansfield turned slightly. "There's a plane headed our way, Mr. Dodd. It's coming along fast."

It was a mere speck on the horizon as yet. That way lay Paris. For a moment Steve's heart jumped. Was it Hanteaux, perhaps, taking to the air to escape from Clay?

The plane grew rapidly on the sight. It was traveling at a terrific clip, straight for them. It was a big ship, far bigger than the one in which Hanteaux had taken off across the Atlantic.

Dick turned again. His face was white, but his voice was steady. "It's a bomber, Mr. Dodd, and a Swazy-Angho. I can tell from the cut of the wings."

"What does that mean?"

"Only the War Lord has Swazy-Anghos," Dick replied quietly.

Steve swore bitterly, while Jimmy looked solemnly at the disabled machine gun.

"Then it's Clay," Steve exclaimed. "He must have finished off Hanteaux

and is coming back with the supply of antidote Hanteaux had."

"If it catches us it'll be just too bad," Jimmy remarked to no one in particular.

The pilot wrestled with the controls. "We aren't fast enough to escape," he threw over his shoulder, "but we can try."

Steve jerked forward suddenly. "Wait a minute," he called excitedly. "I've an idea——"

Jimmy's shout drowned him out. "There's a whole slew of planes coming up fast, following him."

Mansfield said in a dead tone. "Reinforcements. We're cooked!"

The electrician spat disgustedly. "Reinforcements, hell! Them's Frenchies. I seen pictures of them planes and they're chasing Clay hell-bent-for-election."

Dick whooped. "You're right, Jimmy. Where in tarnation could they have come from?"

Steve leaned forward, eyes burning. He spoke rapidly. "Hanteaux must have gotten our messages. And did the right thing, being a Frenchman. He's used the antidote first of all to restore French soldiers and aviators to life. He's had not more than an hour at the most. But he seems to have made good use of his time."

For a young scientist who had disbelieved firmly in war and battle and the whole profession of soldiering, Steve seemed to be enjoying the new shift of events hugely.

But Herr Kuntz put his finger on the crux of the situation in his mild, weak voice. "That bomber is too fast. They can't catch him. And Herr Dr. Clay, he knows how to make the pseudonebulium. It will not be very *gut* for the world."

It was obvious. The bomber was pulling away from its pursuers, and heading directly for the territory of the War Lord. Steve's jaw tightened. His

idea! The one that had been interrupted by the apparition of the French battle planes. He measured the distances carefully with his eyes. Mansfield had swerved from the oncoming bomber, but they were still in front of it.

"Cut back across its path," he said crisply. The pilot looked at him in astonishment, but by this time he had learned better than to argue. The plane swung in a wide circle, doubled back on itself. Unless either one swerved there would be a collision. Dick Mansfield thought of his young wife back in East Haven, waiting anxiously. The perspiration beaded on his forehead, but his hand did not shift from the controls. If Mr. Dodd thought they could save the world from the clutches of the War Lord by a suicidal crack-up with Clay's ship, he wouldn't be the one to draw back.

STEVE had no such sacrificial intentions. At least not just then. He was firing rapid questions at Jimmy. "You've got a directional beam on the transmitter?"

"Tight as tight and true as a knife edge," Jimmy said proudly.

"Think you can focus it on Clay's ship?"

Jimmy squinted at the giant of the air. Not five miles separated them now. At the headlong pace of both planes it would be barely a minute before they'd meet—and crash. "In thirty seconds," he announced calmly.

"Good! Hop to it. And send full juice along the beam—all you've got."

While Jimmy's fingers dazzled with the speed of their movements over the apparatus. Steve explained to the unspoken query of Herr Kuntz. "It's a chance, nothing more. I noticed in working with the antidote that it wasn't very stable. Lasted not over two weeks at the most. Krypton was always considered absolutely inert. I literally forced it into the combination by means

of continued radioactivity. Therefore its chemical bonds must be highly unstable.

"A powerful tight beam focused on the antidote should, I believe, by its rapid oscillation of energy, jar the krypton back to its former inert, inactive free state. Each gram of the liquid contains ten litres of free gas. If the release is sudden, the expansion will be immense. That means a violent explosion, and a violent explosion—" Steve broke off. The rushing ships were less than a mile apart now. Jimmy was still doing complicated things.

"You assume, *natürlich*," Herr Kuntz stated calmly, "that there is a supply of your antidote on board with Clay."

"That is the gamble."

"And if not?"

Steve shrugged casually. "Then we'll ram them. Clay must not get away." Kuntz nodded silently, as if everything had been satisfactorily explained. There was no change in his placid expression.

The planes were less than half a mile apart. A tracer bullet zipped through the air in a long fiery arc. They were getting the range. The bomber shifted to the left. Dick shifted also with grim intensity. If a head-on collision was what Mr. Dodd wanted, why, then it was up to him to furnish it.

Jimmy said: "O. K. It's all set." He pushed buttons. A long spark crashed out from the antenna, blended invisibly into space. But Jimmy knew, and Steve hoped fiercely, that the surge of vibration was scooting along a tight, restricted path straight for the monster bombing plane.

More bullets. The *rat-a-tat* of a machine gun. The staccato bark of a rapid firer. A wing tip shattered into nothingness. The plane careened, righted. Jimmy shifted focus by hand, steady, unconcerned—a bare five hundred yards.

The crew of the bomber evidently

sensed their purpose to crash. They swerved desperately. At maneuvering they were not as fast as the lighter plane nor was their pilot as skillful as Mansfield. He uttered a prayer and swung straight into its path.

Steve stiffened. His idea had not worked. Either it was theoretically wrong or there was no supply of antidote on the other ship. Which meant a crack-up as the last hope. Deborah! The vision of her warm, searching eyes, the pure oval of her face, rose to torment him. Yet it was the only way. Good-by, Deborah, good-by—

A vast puff of air smote him full in the face. A tremendous weight pressed suddenly upon his chest, made breathing impossible. Sky and land and plane rocked and heaved in a huge concussion of sound. They went sliding down an invisible chute of atmosphere. All around them fragments of steel and wood tossed in furious uproar.

Mansfield strained at the controls until the veins stood out on his forehead like whipcords. Down, always down, in a spinning sideslip, while the solid earth rushed ominously up to meet them. The plane leveled momentarily at one hundred feet, hesitated, then dropped with a fluttering of broken wings and disjointed struts to a plowed field. There was a splintering crash which catapulted Steve into darkness.

He awoke minutes later to find himself free of the wreckage, and his hurts being skillfully bandaged by a strange doctor in the horizon blue of the French infantry. The familiar, great-bearded face of Armand Hanteaux grinned down at him. "*Sacre nom*, Monsieur Dodd!" he swore, "but that was a crash!"

STEVE looked feebly around. Dick had a gash across his forehead, Jimmie's wounded arm hung limp, and Kuntz sat on the ground nursing a swollen jaw.

"Where," he asked "is Clay?"

Understanding flooded the mobile features of the French physicist. "*Nom de chien!* So it was our very good friend, Dr. Clay, in that bomber, eh? He, my friend, is gone—gone," and he screwed up his face in sardonic piety, "to the little angels with leather wings and pitchforks in their lovely paws. It was beautiful—how she went *pouf* like a bag of smoke."

"You received our warnings then?" Steve lifted himself.

"But of course. I arouse my very brave compatriots, and we make ready—what do you Americans call it—a hot spot for our very good friend. But he almost escaped, when you come along with that most efficient weapon of which I am dying to hear."

But Steve was singularly callous about Hanteaux's dolorous condition. There were other matters to be thrashed out first.

"How much of the antidote did you use?"

The Frenchman's eyes widened. "Only a sufficiency to receive Monsieur Dr. Clay. About three hundred units. The rest I keep for your plan of campaign." He lowered his voice. "I am sorry about these. Some are only *gendarmes*, not fit maybe for the new world. But you understand the exigencies of the occasion."

Steve understood, and felt a choking sensation at the man's loyalty. But he had already come to a momentous decision.

"Hanteaux, Kuntz, I want to talk to you."

They stared at him silently, waiting. Dick Mansfield and Jimmy were a little apart, sensing vaguely that something of the utmost importance was about to happen.

Steve cleared his throat. It was hard to give up all one's enthusiasms, all one's dreams, like this one. But the skeptical,

kindly features of Samuel Gardner rose in his mind to comfort him. He realized now that the astronomer had known all along what would be the end result.

"I've decided," he said quietly, "to reawaken the entire world without any further attempts at discrimination."

They gazed at him in shocked astonishment. "Büt, Herr Dodd," Kuntz started timidly.

"I've tried to play God," Steve interrupted, "and it has turned out to be a miserable fizzle. I thought I could pick and choose and erect an ideal civilization, a perfect humanity, free of all the besetting sins of the past. I find it is impossible. Within our tiny group at East Haven, there were dissension, jealousies, hatreds, envies, lusts, all the vices we had thought to uproot. Nor did scientific attainments or intellectuality mean a thing.

"Dr. William Clay was a scientist, a picked man, and he effectually destroyed my idea and almost plunged a world into slavery. The War Lord is alive, so is his army. Clay no doubt has batches of the antidote in preparation. The whole nation will arise, in arms again. There is nothing left for us but to arouse the rest of the world in self-protection."

He turned to the astounded Frenchman. "Hanteaux, you will give every

one the injection—every one. Soldiers, scientists, mechanics, artists, farmers, peasants, shopfolk, the lame, the halt, and the blind, yes—even the criminals in jail, the stupid politicians, the demagogues, the scum of the earth. Who are we to deny life to any one?"

Hanteaux's face lighted up gloriously. "*Mon peuple!*" he breathed ecstatically. "*La belle France*, you are to live again."

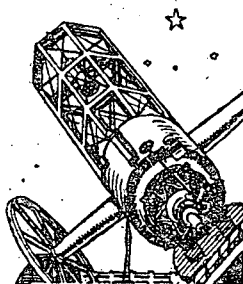
Kuntz asked timidly, yet anxiously, "And my country?"

Steve felt abashed before the intense patriotism of his fellow scientists. Humanitarianism, internationalism, scientific scepticism, he realized, were but pallid symbols to these men.

"Of course, Herr Kuntz," he smiled. "Hanteaux will give you part of the antidote he is now preparing. Within another five days you should all have sufficient for all your needs.

He rose painfully. "We'll radio to Cunningham in England, to poor Clai-borne in China, to Gardner in America, what has happened. Every one is to be restored. Let the world wag as it did before the nebula—and myself—interfered. Let there be wars and trouble; let there be slaughter and poverty; let there be disease and petty spites. Perhaps nature is working dimly through these agents toward something of which we have as yet no knowledge." He smiled wryly. "I am not God!"

THE END.





Good Helpful Criticism—I Like It!

Dear Editor:

I have been promising myself this pleasure for a long time, but a rather busy year on furlough from my work as a medical missionary in Liberia did not give much time for it. Finally I got my copy of the August Astounding Stories, and put it away, knowing that I would have time on the ship to give it the time that I needed for the job I wanted to do. So here goes:

I'm not going to take up a lot of paper with remarks about your stories. They are good: some better than others, but practically all of them showing much improvement over the story which was called science-fiction fifteen years ago. But there is a matter which has been preying on my mind for a long time. As a result, I want to offer a suggestion. I realize that it is "astounding" in itself; it seems never to have occurred to any of your editorial staff; but if followed it could not fail to result in considerable improvement in the magazine. My breath-taking recommendation is this: require your illustrators to read the stories before they draw the pictures for them.

Simple, isn't it? Why didn't somebody think of it before? But, lest some may think I'm merely trying to be funny, I shall refer to this aforementioned August issue and demonstrate my point.

There are three illustrations in the book which really illustrate the story. If the one for *The Upper Level Road* is Marchioni's, as it seems to be, the score isn't so good for Dold. The others are the one of *Lost in Space*—which didn't choose a very dramatic part of the story, but is otherwise not objectionable—and the second one for *The Son of Redmask*. One might criticize the artist's interpretation of the phrase "serried array," but we'll give him the advantage of perspective and let it go at that. But the others!

The Galactic Circle: The first picture is a good illustration of page 31: "The cube came to rest on a platform within the strangest space he had ever visited." Instead, an entirely irrelevant quotation from page 22 is appended, and in reading the story one wonders for nine pages what the picture is all about.

The picture on page 27 is much better, but the towers were supposed to be cylindrical—

which the one in the distance is not—and six of them, presumably equally spaced around the sphere, would not be visible to one another. As for the cover, it would be essential to rewrite the whole story in order to make it illustrate anything; so I spare you the details.

Rebellion! The first picture is not so bad, except that there should be a wall and doorway between the group on the ceiling and the group who are floating in the air. See page 79: "Gar 173 came . . . in a strange flop that ended with his feet on the ceiling. . . . Gar stepped across the door frame and into the strange, inverted room."

But the second picture—pages 74 and 75—interprets "a few brave Tharoo" as 23: "a portable atomic blast" as an engine mounted in a caterpillar tank; and "no light, no discharge, only the quiet sucking in of the atomic blast" as a display of fireworks which would pale a Fourth of July celebration. And where are the Mauns who were left behind? See pages 80 and 81.

The Star That Would Not Behave: The satellite of Chaos is not a crescent, which is what the story definitely calls for, but a partially eclipsed circle, which is impossible. And who ever heard of a full moon rising at eight o'clock? See page 89.

Man of Iron: Not bad, except that the tubes are too large. Page 95 has "four tubes, each half as high as a man."

The Son of Redmask: I was wrong at the start of this letter; there is nothing wrong with the first illustration; and *The Phantom Dictator*: also Marchioni's seems to be all right.

But now for *Twelve Eighty Seven*: It is rather hard to spoil the illustrations for a story of this type, but Dold does his part. In the first one, Jay is using a graduate which obviously will not measure a liquid, much less a powder, to an accuracy of 10.02%, and where is the balance which will weigh that closely? And the other picture—was it anywhere mentioned as a custom of that peculiar country that a man could wear a dinner jacket to luncheon?

St. Paul may not have been a scientist in the present-day sense of the word, but he had some good ideas about scientific thinking. I respectfully refer the gentleman in question to I Thessalonians, 5:21.—Norman R. Sloan, M. D., American Lutheran Mission, Monrovia, Liberia.

Balance—But Not for Tucker!

Dear Editor:

Just finished reading the September issue of *Astounding Stories* and it certainly was a corker this time. I have read part one of *Islands of the Sun*, by Jack Williamson. In my opinion, *Greater Glories*, *Sky Rock* and *The Blue Infinity* were the three best stories for this month, though they were all fine.

The cover this month was considerably better than that of the August issue.

As to trimmed edges and the like, I prefer them, but after all, it isn't the edges that we read but the stories which are contained in the magazine. The magazine, as it now is, satisfies me perfectly.

You are giving more stories, better stories, better illustrations both on the covers and inside than any of the other science-fiction magazines on the market to-day. Your magazine also has better colored drawings than the other competitive mags.

I bought another science-fiction magazine the other day, languidly and uninterestedly read through its very poor stories and started on a fourth which was so "crazy" that I threw it away in disgust.

You have stated a truth on your September cover. *Astounding* certainly has the largest circulation of any science-fiction magazine. It is also the most popular!

I notice that some of your readers want the old type of blood-and-thunder stories. Well, as far as I'm concerned, they can have them. I like adventure also, but those stories of five and six years ago certainly were the most hackneyed, hair-brained stories that have ever been my ill fortune to read. I made an attempt to read one the other day and threw the magazine aside after five minutes of reading. At the top of the page were these words—"Mystery, Adventure, Romance." Ninety-three pages in all, with a total of sixteen pages of advertisements, and three "punk" so-called science stories. And the covers and illustrations of that day! Boy! I wish a few of your dissatisfied morons could see a few of those covers, and I'm sure they wouldn't complain about Brown's work.

I have read many of C. L. Moore's works, and also those of Clark Ashton Smith, and I know there is nothing juvenile about Smith's fantasy stories. He would be a great addition to your staff of authors. I believe a little fantasy together with science-fiction would improve your magazine incomparably above those of the other science magazines.

Why don't those consarned readers who are always clamoring for more science, read a few of Einstein's theories to begin with? That would hold 'em for a while. Then there are the public libraries which are full of cold science. Science is all right, but I don't care for so many scientific explanations that it spoils the entire story, and makes it boring to read.

Well, blow me down! To R. M. Holland: I yam disgusted with you. Phooey to you from me!

Say, aren't you getting just a little bit snorty, Mr. R. M. Holland? So you want the covers painted with soda pop, the stories printed in type made of weiners on thin slices of bread stuck together with chewing gum! Personally, I eat me spinach and when I get a few mouthfuls of that under me belt, I can lick any bloomin' blubber of a sailor which says I can't. So again I say, phooey to you from me. I yam disgusted.

You and Bob (dictator) Tucker air two of a kind. How many times per day do you brush your teeth? Be careful when you attempt to masticate *Astounding Stories*, jammed in between thin slices of bread with weiners made of type, held together with chewing gum.

If you have false teeth, the gum will pull 'em out if you try to eat the aforesaid sandwich, and if you try to digest the rest of the meal, I am sorely afraid that you will have a nice case of apoplexy, my poor young friend. Does your mother let you play marbles with the other little boys in your neighborhood?

And now for the great "Dictator" Tucker!

Dear Dictator: I yam disgusted! I hev got the itch. I thinks it is the seven-year itch, and I scratch so much I kin not eat me spinitch.

Puleese send me by I. O. U., collecting (15) fifteen bottles o' Antitch so I can eat me spinitch again.

I wear red-flannel underwear. I heard yours are silk, and are embroidered with a large "D" which stands for dictator. Am I right?

You air a "good and beautiful" man.—Bob (Dictaphone) Calif., 235 Broadwater Avenue, Billings, Montana.

Suggestion for Critics!

Dear Editor:

I have just finished my perusal of the September issue. The stories were good, but the cover was rotten. It looks like a blue and purple lollipop. As for the magazine, as a whole, it is easily the best on the market. However, I think it would be improved by smooth edges. As for these half-baked critics who keep yapping for less science and more adventure, I suggest they be strangled, though even that is not just. Nevertheless, I would like Hawke Carse back again.

Brass Tacks is great. I enjoy it. Also, I would like to see the magazine a bimonthly, if you could still keep up your present standard. Hoping you get better and better.—J. H. Dunning, Wayland, Michigan.

"Mag" Is Out!

Dear Editor:

I wish to say that I, too, agree with H. A. Moores, whose letter appeared in the June issue. But unlike H. H. Welch, I share with Mr. Moores his aversion to calling a magazine even such a vile one as Mr. Welch terms this one, a "mag."

I like *Astounding Stories*, and if I miss a great deal of its worth through my lack of scientific knowledge, their appeal to the imagination makes them always interesting and entertaining. Yours for broader-minded criticisms.—Veva Ford, San Diego, California.

More About "Lo!"

Dear Editor:

I would like to congratulate you on the really fine September *Astounding*, and to discuss the stories in detail. But I won't, because you've doubtless been praised by the other tackers *ad nauseam* already.

Instead, I'll repeat: I want a reprint library! Most of the other readers do, too, I'll bet. So how about writing to the editor, fellows? Better still, editor, print a quarter or half-page voting slip just once and ask for opinions. Once'll be enough!

Now I've finished with what matters. Print the above at least; if you cut out chunks of the rest, it will read just as well!

The September Brass Tacks sees *Lo* back in the news. I'll never forget—it was last July—when I went up to a news stand at a railroad station. There, glaring defiantly at me from a yellow and black dust-jacket, was *Lo*. It was in the book form.

It's a pity, though, that some one doesn't continue where Fort left off. For example: from the London *Daily Express*, of December 23, 1934, I read: "Three moons with a brilliant cross in the center of one of them were seen, over Quebec last night."

I could make a crack about drinking the Christmas presents before December 25th, but I won't, for "Excitement was caused in Rockland, Maine, yesterday when two large circles of light appeared round the sun."

How in the name of multiple refraction—or

something—can those two pipe dreams be explained?

And then there was the Surrey, England, whirlwind this summer. At least, the papers said it was a whirlwind. The top of a haystack floated off, rose straight up and out of the field and landed on somebody taking the baby for a walk. A near-by tree also quivered and strained upward, said observers. Maybe it was a whirlwind, but *Lo* has made me skeptical, and anyhow, they aren't common in England.

I got this from the London *Daily Herald*, about November, 1934: "Major Raymond Philipo's latest apparatus consists essentially of two small pith balls suspended from silken threads. They are given a slight charge of static electricity, and then, if a person holds two glass rods, one near each ball, he can will either ball to jump outward and touch the glass rod. I tried the experiment and found it infallible but baffling."

It sounds too good to be true. Still, I'm going to try it out, and some of you may care to do the same and report in Brass Tacks.

One last gem: "Captain Barry, submarine commander for seventeen years, said at a lecture that submarines were used by ancient Greeks and Egyptians in 500 B. C. Their earliest records show that they had vessels in which men were able to descend deep below the surface of the sea." Tell it to the (sub)marines!—Sidney L. Birchby, 38 Nightingale Avenue, Higham's Park, Essex, England.

Serial Salvation!

Dear Editor:

Well, I'm back and I've got a kick like an oversized pile driver. *The Blue Infinity* sure was terrible. Listen to some of the screwy celestial mechanics Fearn put in it. First, he calls Alpha Centauri twenty-five billion miles distant. It's four light years! Figuring that out one gets almost twenty-five trillion. He'll excuse that by saying he used the English system of counting.

Here's some more. On page 86, at the bottom of the second column, he says, "More hours, more millions of light years!" just after they passed the large dark star. Later, we find that the dark star was seventy million miles from the ether's edge, and Earth stopped eight million miles inside the "blue infinity." Therefore, Earth was about seventy-eight million miles from the dark star, or .0000132 light years away. He should have said, "more millionths of light years." By the way, Fearn could make a fortune with those machines to store electricity.

It was altogether an awfully-punk issue, the only two redeeming features being the serials. Both Williamson and Taine are above comment. Bind the two serials separately so I won't have to mark my file with that other mess of stories. Again I say, Taine's story *Twelve Eighty-Seven* was just peachy.

I'm glad Tucker's going to abolish the menace of wire staples. Some of us chemists will have to organize to create synthetic flavors for the chewing gum. Let's have the first issue all raspberry flavored. Don't forget, editor, burn all of Fearn's stories.—Ralph Schroeder, 1022 Eighth Avenue, S. E., Rochester, Minnesota.

Hopes Ride High!

Dear Editor:

Can you please let me know what the subscription will be for your magazine for one year? I am getting them from local book dealers, but very often I have to hunt for them as they get sold out too soon after publication.

If possible, I shall be very pleased if you will send me copies as soon as you receive my letter, then I shall send you the subscription for one year as soon as I hear from you.

I may mention that I have been reading your magazine, amongst others, for quite a while, and it is, without a doubt, the best on the market to-day.

I get some of the other science-fiction magazines, also, direct from the States, but when I get hold of an Astounding Stories magazine, I forget all about the others. As a matter of fact, there are two lying in my room that I haven't touched because I had a couple of Astounding Stories magazines.

Like the rest of your readers, I also say: Keep up the good work. The serial, *The Einstein Express*, was pretty good. That is, it started off pretty well, but somehow it was somewhat flat in the end. I suppose I was expecting too much. This new serial of yours looks good to me, and I am expecting a lot from it. So I really hope I am not going to be disappointed again.—G. E. Malan, c/o Barclays Bank, Hospital Avenue, Johannesburg, South Africa.

Another Problem!

Dear Editor:

I am turning into a very dangerous character just because the Brass Tacks have gone to the dogs. I certainly agree with D-456 that such trash, publicity gathering, egotistical and what have you, as Bob Tucker writes, is merely a waste of space—and time it takes to read it. Why should you publish such unheard-of nonsense? All he does is run other people down and gets a bad name for himself. Ditch him!

I hope that you will publish this first treatise of mine, mainly because I have stumbled upon a problem I can't seem to puzzle out. I found it in the otherwise perfect September issue—*Greater Glories*, by C. L. Moore. It is on page 115, the last column. Here it is: "Two walls of it (the vast chamber) met at right angles; the other two curved and merged together into darkness. The floor was curved, too, and the ceiling."

Now how can two walls of a room be at right angles with each other, and the other two curve and meet, and yet the two opposite walls be curved? If any one except Einstein can enlighten us, will he please let me know?

Now let me place my sincere appreciation for such a superb story as *The Blue Infinity*. I've always wondered why men were always the main character in a science-fiction story. It wasn't this fact, though, that made the story so wonderful. It was the whole thing. The whole issue was grand.

Well, I can think of no more to say except this: Why do readers not want such stories as *The Skylark of Valeron* and *The Mightiest Machine*? They ask for science-fiction and what stories are more so than these? Let's have more of them!—Randall O'Brien, 2124 Rockingham Road, Davenport, Iowa.

Maybe We're All Crazy!

Dear Editor:

Whether every one agrees with me or not, I jolly well find the September issue of your interesting magazine very fine reading. The serial *Islands of the Sun*, however, I haven't read, and won't until I get it all in one piece and then take your word for an enjoyable evening. Sure do hope you keep up the good work; you're doing exceptionally fine right now.

There is, however, one point in an otherwise extremely well-planned and well-written story, *The Blue Infinity*, that I would like to be enlightened upon—pro or con, it doesn't matter much personally. You see, I'm really not such a bad fellow to get along with or without.

According to the Lorentz-Fitzgerald "contraction equation" ($L=L_0\sqrt{1-v^2/c^2}$)—don't quote me, I copied this from a book—mass traveling at the speed of light has no length and time has ceased progressing. If the speed of light was exceeded,

then mass would revert to its original state and time would reverse or travel backward.

Now in our little story, *The Blue Infinity*, the heroine has our poor, little Earth traveling at such a speed that it makes light of light. Continuing at such a speed over the period of time mentioned in the story, what really would have reached the new universe would have been a badly frightened bunch of prehistoric savages shivering upon an unusually large lump of dirt—we call it Earth—covered with sundry things, such as ferns, fungi and a chilly atmosphere.

Am I right? Go ahead, ask me! Well, now that that's settled, we can—what? Now listen, Tucker, you old buzzard, don't tell me that you're going to disagree as usual. You must be worn out by now—I hope.

Another thing: I don't quite gather—all this rumbling and quaking about Painter Brown's covers. They seem quite O.K. to me, but maybe the art in me has taken an atavistic twist. However, I'll let Brown be the judge of that problem.

Maybe I had better shut up now because all I know is what I get from Wollheim, which is the hyperextremity, to the *n*th power, of minute quanta.—Charles Shipley, 1207 Park Street, McKeesport, Pennsylvania.

Burning Up a Few Suns!

Dear Editor:

After seeing the length of my letter on *Age in Brass Tacks*, I hesitate to risk taking up more room. But after being too busy to write for three months, I'm full up.

The Son Of Redmask was rather a disappointment, but Williamson's return made up for anything. Let's burn up a few suns in celebration of the arrival of our beloved chief space pilot in port. Commander Jack, we salute you! *The Galactic Circle* was better than ever.

Haggard gave us a very enjoyable story as his first contribution to you. One meets so few dogs in space. And Stuart brought his trilogy to a splendid close, though the whole three aren't equal to *Twilight*. Maybe that would be too much to expect.

With Taine finishing his serial—too good to need comment—Williamson starting a new one, Fearn and Wandrei turning out some of their best work, and C. L. Moore coming back to Astounding, the whole two years seem justified by the one issue. So few people can wrap a dream in star dust, breathe fairy life into it, and set it to the music of the spheres that C. L. Moore's stories are always more than we dared hope. For sheer suggestive beauty and lingering memories of things that never were, this writer is equaled only by A. Merritt. Need I say I liked the story?

Wandrei has always been a potentially good writer, and, because of that, *Earth Minus* was most welcome; I hope it marks the beginning of a new Wandrei, for it was the finest theoretical fiction—stories made around experiments—he has ever written, not excepting *Colossus*. In it he has finally reached that for which he has been groping—a story with an effect, rather than a search for one.

Of course he couldn't produce monotron, because the atomic disintegration caused by 10,000,000°C., which is also unattainable—would have resulted in an electric explosion long before the formation of monotron. But who cares; so long as the story was good?

It seems to me, though, that since monotron was the matrix of all things; space; cosmic rays; light electricity; and matter were progressively more dense products; and that since cosmic rays penetrate seventeen feet of lead, and space penetrates all things; even though matter warps it, monotron energy would be too fine to have any effect on matter; but would know no restrictions; even such as light meets in space, and would disperse through the entire universe almost instantly. Wandrei's theory made the better story idea, however.

Then, too, the original state of the monotron

must have been a complete stasis, lacking even dimensional form, no time-space having been created. Before re-evolving, time space, the monotron might reestablish original conditions, assuming it were not instantaneously diffused; this stasis of all time-space phenomena—time, inertia, dimensional form, etc.—might throw the part of the earth it touched outside the entire universe, and the monotron might start a tiny universe all its own, with the Earth part as an inactive addition. Just what such a tiny universe would be with the comparatively immense Earth part drawing on its space and time, and exerting a gravitational pull is something for the imagination to play with.

I should like more of this type by Wandrei; maybe he can tell us next what effect that material energy sphere would have on the solar system, or the universe. But no made-to-order sequel, such as *Colossus Eternal*. Since Wandrei has found himself, let him stick to his discovery.

Incidentally, I wonder how Hamilton would have handled Wandrei's idea. This world was once so easy to save; now it is so easy to destroy; times change, it seems. Even Hamilton has changed, and *The Accursed Galaxy* was the best and most different thing he ever did! More power to the changes of time.

If no semimonthly hope is left, how about that four-issue-per-year quarterly? We gotta have some encouragement, you know. I've managed to get nine steady readers for you, as well as several who usually read Astounding. Others must have done better, for my circle of acquaintances is limited. So why not a quarterly, just to say, "stick to it!"—Ramon F. Alvarez del Rey, 1016 Massachusetts Avenue, Washington, D. C.

An Argument for Argument!

Dear Editor:

I suppose you want to know which story I think is the best in the August Astounding. Do I favor Williamson's *Galactic Circle*; or Stuart's *Rebellion*; or Schachner's *Son of Redmask*? No, I choose none of these widely advertised stories for the best of the issue. Instead, I name a little yarn hidden away in the back of the magazine: *The Phantom Dictator*. That story is one of the most refreshing I have read in a long time—an original plot, written well, and with an intelligent ending—any other ending would have been hackneyed. And best of all, it is something I had almost despaired of seeing—a radically original idea without going into all sorts of hyperdimensions, terrific energies, and colossal distances.

Just so you won't get too swell-headed, I would like to say that the cover is one of the worst I have seen in a long time. Besides the art being horrible, it is a total misrepresentation of the description in the story.

The story itself, *The Galactic Circle*, is not so hot. It starts out like a mediocre-size traveling story, copying brazenly from Donald Wandrei. I don't like the way Williamson jumps the problem of conservation of energy, although he does admit that the problem exists. Then I had a premonition that he was going to copy from Hamilton's *Eternal Cycle*, but instead he turned around and made something more or less original. Also, the human-interest plot was very weak; so upon due consideration, I decided that I didn't like the story.

The Upper Level Road is a very good story, although the idea is rather undeveloped. However, all authors can't be Einsteins.

Lost in Space has a very unoriginal plot, a hackneyed title, and an extremely weak ending. I presume that the ending was supposed to carry the story, but I am afraid that it failed miserably. Although the idea is not something that can be proved or disproved mathematically, it sounds very weak to me.

Rebellion is a very good adventure story, although the plot is very much like Campbell's *Contest of the Planets*. *Son of Redmask* is also a good story.

The Star That Would Not Behave is written very amateurishly, starting out like stuff that

was discarded back in 1928, and ending up with a preposterous idea which a little consideration will show the fallacy of.

Man of Iron is a brazen plagiarism of Leinster's *The Mole Pirate*.

Arthur R. Mink has no sense of humor; note his fourth point.

I wish to make a lengthy comment upon what Herbert Allcock says about dogmatic smugness, mental laziness, and being unwilling to accept new concepts. And I will not make it scathing, since he so expressly forbids that.

In my opinion, argumentation, instead of being a retarding factor in civilization, is one of the greatest causes of advance there is. Two simple examples will make this clear.

A few months ago I gave a talk in the astronomy club in school. The subject was "Einstein and Relativity." In the course of this talk I asked for questions, and got plenty. In the audience were boys who knew science, and they besieged me with questions, trying to trip me up. However, I fortunately was sure of my ground, and was able to answer all the questions. But the point is that by the audience asking questions and arguing with me about the points, we were both able to get more out of the talk than otherwise; they simply dragged out of me facts that I had overlooked.

Example Number Two: The first part of *Skylark of Space*. Seaton was just formulating the theory of intra-atomic energy. Seaton was the brilliant imaginationist, and Crane, who was helping him, was the steady safety valve. Seaton would sprout out with a lot of theories. Crane would nail them down with mathematics, tear them apart, and then Seaton would build them over again, infinitely stronger than before.

This shows that by means of arguing a point, you can get more out of it than by merely letting it go as it is.

Now to apply it to *The Irrelevant* question. Take my personal viewpoint on science. I pride myself on having a good deal more than average imagination. However, my imagination is not the type that will accept any half-baked theory that comes my way. I don't demand solid, mathematical proof for everything; for if I wanted that I couldn't read science-fiction. But I do demand that the theories do not violate either reason or accepted scientific facts. If one does, then it must show me by proof that it is true.

The Irrelevant violates both my reason and the law of conservation of energy, therefore the author must prove to me that his theory is valid. I don't like his proof, so I attempt to argue with him, with my limited knowledge. The important point is this: If van Kampen's theory is true, then by constantly arguing, by asking questions, the proof will out, and if the theory is false, then it will sooner or later be proved so.

I hope this satisfies Mr. Allcock as to why we are arguing about *The Irrelevant*. I'll bet he is the kind of a person who can be sold the Delaware River Bridge for ten dollars and who will believe that the moon is made out of green cheese if somebody puts it in print.

I can't resist a bit of sarcasm here. I wonder if Allcock and others of his kind can dimly comprehend that perhaps the people arguing about *The Irrelevant* do so because they honestly believe the theory is false.

I wish to congratulate Mr. del Rey for his excellent letter concerning heavy water. It covers the same ground as did my letter of the previous month, but does it so much more completely that my letter shrinks into insignificance beside it. A suggestion was made in that letter to have some high-school boy check the science of future stories. If you ever take that seriously, I could use the job.

The APSEMATRSTFS will reign supreme, because after its plan goes into effect there will be no science-fiction magazines to have staples, either platinum or chewing gum. Instead, there will be merely spools of wire upon which the literature will be telepathically recorded.

This is the longest letter I've ever written to this magazine, so I'll close.—Milton A. Rothman, Member AP-385-FS APSEMATRSTFS, 2500 North 5th Street, Philadelphia, Pennsylvania.

Enter—the Referee!

Dear Editor:

I hereby appoint myself the unknown champion of the great first cause of Tucker. This automatically sounds the literary death knell of a certain Mr. Wollheim. The ashes of this unworthy opponent may appropriately be scattered from a tramp steamer into the Black Sea.

It is rumored that the great Tucker once stuck his finger on a wire staple. The report does not say that the staple was in a science-fiction magazine, but I have an idea that it was. Imagine the great Tucker belaboring his mind with the sticklers in a detective stories pulp! Anyway, he started something. I am going to carry on his great work.

Ivan, my valet, tells me that Donald A. Wollheim was expelled from a certain science-fiction club for foul practices. This is only what one would expect. What fair thing could a jelly bean of his type do? His great crime against the SPWSSTFM caused his expulsion from three organizations outside of this, namely: Hitchhiker's Union, Ape Society, and Society for the Mutual Aid of Aged and Infirm Field Mice. That is his record. For this, the International Council of One, consisting of Mephisto, has sentenced Wollheim to be boiled in oil for five days out of every four.

Because of his sorry condition, Wollheim will be granted the great privilege of crying in my beer. Tucker may cry in Ivan's beer.

By the way, friend Tucker, you laid yourself wide open to an attack when you bound the now and then famous D'Journal with wire staples. I had hoped your intense hatred of wire staples would cause you to apply chewing gum. Maybe this humble suggestion will help: Roll the printed magazines into a small cylinder and wrap with a short section of log chain.

Wollheim has induced in me a bad case of nausea. Only one thing will cure it. Ivan and I are going out for a beer. Wollheim's reply via Brass Tacks is greatly invited. Let's have a war. Ivan and I are ready.—Mephisto.

It Behooveth and Puzzleth!

Dear Editor:

As I have never written before, it behooveth me to make some inquiries. It puzzleth me as to what Mr. Holland meant by the next time, not room enough there, SOPUMUMSTFFUSA. Also if SPWSSTFM means what it looks like.

The *Avatar* in the last issue was good but rather a tiresome story. Those skylark stories give me a pain. I read one through and then wondered what the story was about. I say, less science and more fiction.

The Blue Infinity was marvelous, superb, and truly lives up to the title of the magazine.

Hope the rest of *Islands Of The Sun* is as good as the first.

I think *Earth Minus* was good but the author could have made a truly great story of it had he developed it a bit further.

I enjoyed *Lady Of The Moon* but was disappointed when it ended so abruptly. I join the ranks of the hftroch—howlers for the return of Captain Hanson. *Twelve Eighty-seven* was good, but if it ran another month I'd begin going batty for the simple reason that it was so long drawn out.

I also have created myself supreme ruler of the society which I have called the SPCMR—Society For Prevention Of Cruelty to Magazine Readers—organized for the purpose of howling, if nothing else.

I will now turn serious. I like the editor because from what I have seen he is an intrepid and daring man. He will print all remarks that he can, good or otherwise. And to have a magazine which will print criticism as well as bouquets is indeed a small utopia.

I will now sign off and let the rest of the dictators fight it out. Best wishes to the

SPWSSTFM and all the rest of the international representatives of pumperdink and allied nations:—William V. Kenney, (Dictator Of Helvania) 90 Walworth Street, Roslindale, Massachusetts.

"Tarred" and Feathered!

Dear Editor:

What, oh, what did you mean by printing such a story as *The Blue Infinity*?—and in the same issue that you proudly proclaim you have the greatest science-fiction circulation? The story should have been cast to *The Blue Infinity*. In addition, the whole layout for September is below par. However, most of your stories are excellent in the long run and it is only natural that you slump occasionally.

I've been thinking about *The Irrelevant* and have formed a theory to help Mr. van Kampen along. I propose that since a spatial length and time are relative, then force is relative; or perhaps I should say, work done is relative.

That story in the August issue about the Sun meeting its own apparition is incorrect if the author went on the Einstein theory. Einstein says space is curved in the presence of mass. Therefore light would curve around every star near its path, and travel, on the average, in a straight line—not in a great curve which would meet the Sun again at the antipodes or starting point. However, if he proposes that space is curved regardless of matter, I have no objection.

I enjoy reading Dictator Tucker's missives and other letters written in the same vein. Let's have some of everything.

The Scientific Czar of Acturus said he started to read the September issue via his "bottled light through the de-etherized channel" and after reading *The Blue Infinity* he also wished the issue was in said infinity—with the editor.—Dale Tarr, 908 Vine Street, Cincinnati, Ohio.

It's the Story That Counts!

Dear Editor:

I congratulate you on your second birthday. It is something to be proud about. Every month I swore that that issue was the best. But, you still can be improved. Not so much on the quality of stories—though a few more interplanetary stories would be good—but on the binding of your magazine. I've just finished reading squawks about the paper edges, illustrations, etc. But for my part I buy the magazine for the stories—not the paper. I do like the book to stay together! Wire staples do not hold! If you must, charge a nickel more! It's worth it to get gum binding. I am hereby applying for membership in AWSAA.—Joe Waterman, 137 Claremont Boulevard, San Francisco, California.

The Old and the New!

Dear Editor:

The black and yellow cover for the September issue was the best I have ever seen—much better than the red August one. I read several old Astoundings the other day and was very much impressed. Although the appearance was not as good as the new Astounding Stories, the stories were just as good.—S. P. Wright, Arthur Burks, C. W. Diffin, R. F. Starzl, Ray Cummings, Paul Ernst, and Anthony Gilmore. Where are they now? Are they still writing?

C. L. Moore is one of the leading weird-fiction authors. Don't make Astounding Stories a weird-fiction magazine. By the way, the old magazine had straight edges. *The Blue Infinity* was well written, but spoiled by the matter-of-fact ending.—J. Irwin Dalton, Catonsville, Maryland.

Interplanetaries, Please!

Dear Editor:

Three cheers for Astounding, the best scientific-fiction magazine printed. I have been reading Astounding Stories for a few years, and I like the stories. This is the first time I have written to any magazine, because I never took time to write, and did not want to write. Enough for that.

Please do not go bimonthly; it would ruin our magazine, but it's O. K. for a quarterly. You have the right kind of authors and illustrators, and it would be very hard for them to keep up with the bimonthly magazine.

Another thing, most of us readers like interplanetary stories, so try to have one each month. The magazine gets better each month, but an interplanetary story would improve it.

Besides Astounding there are two other science-fiction magazines on the market, but I prefer Astounding. When I first started to read these kind of stories, I read all three, now I wouldn't read the other two if they were thrown at me!

I am fifteen years of age, and would like to get in contact with somebody of my age who reads Astounding. Yours for a bigger and better Astounding.—William Stocks, 1107 Bingham Street, Pittsburgh, Pennsylvania.

On Degenerate Brickbatting!

Dear Editor:

For some time I have avidly absorbed the contents of Astounding Stories, and this is the first time I have taken the opportunity of writing you.

Due to corruption in the ranks of the SPWSSTFM, I have undertaken the organization of a new sect, namely, the SFUMSFBT, or the Society for Uplifting the Morals of the Science-Fiction Brick-Throwers.

The purpose of my organization is to inject some tact and spirit into the veins of brick throwing. This worthy calling has degenerated to an extremely low state and I hope to uplift it. First, I shall commend a certain H. H. Welch for an excellent piece of brick throwing, and my admiration for him is profoundly increased by the fact that he does not apologize for his slams at the end of his letter. Mr. Welch, I salute you, and extend to you the invitation to join my society.

The August issue of Astounding Stories is bad—in fact, it is worse than those of 1930, the most odiferous of all science-fiction years. There is not a good story or theory in the whole issue. The plot of *The Galactic Circle* was fair, but the story itself was very poorly written. Any challenge?

Editor: you had better print this, as I have already papered the walls of my den with reject slips and one more rejection would not discourage me in the least.—R. M. Tobey, Binghamton, New York.

I Like Helpful Critics!

Dear Editor:

First, I wish to extend my sincerest congratulations on your second anniversary. You have had but twenty-four short months in which to attain your present high standing; but those two years are the beginning of a new era, comparable to nothing previously experienced in the all-too-short history of magazine science-fiction. The resurrection of the deservedly defunct Astounding Stories was in itself a feat worthy of acclaim, but to do as you have done and make it supreme in its field—that is a real triumph. Allow me, therefore, to congratulate you.

Now, a few oblong pieces of baked clay and straw—bricks to the uneducated. In your novellette *Earth Minus*, by Donald Wandrei, the monotonous unit is spoken of as being particularly unstable. Would it not, therefore, revert to a

more stable form of matter or energy immediately the disrupting forces were removed? As there would appear to be a sort of contest going on to find the most inconsequential flaw, I herewith enter my nomination. On page 44, in this same story, Prof. Hall-Carruthers announces his intention to use an iron filling in the experiment. Yet on page 52 he calls it "a one-inch cube of steel." I rise to remark that he must have used quite a fair-sized file.

As I remarked above, Astounding Stories is supreme in its field. By that I mean that the average of your stories is higher than that of your rivals. But, in all the history of the magazine, never has it produced a classic. I can think of but one story of yours which is certain to be widely remembered five years from the date of its publication: *The Skylark of Valeron*. And even that single claimant to future glory would be visible only by the reflected light of its illustrious predecessors.

You seem to have set a certain standard, accepting nothing which is either above or below that standard; and it appears that you intend to keep to that standard religiously. I understand that classics are not found completely written, edited and illustrated, in bottles floating on the ocean, but one can hope for a few in the near future, can't one?

While I have been an inveterate reader of science-fiction since 1930, and a sporadic one previous to that, this is my first letter—and probably my last—to a magazine. On that account it is likely that my indictments will be found sweeping, my criticisms harsh, but still I hope that mayhap it will find its way into the sanctified pages of Brass Tacks.

I hope that we may soon enjoy our Astoundings on the first and fifteenth of every month.—Elton Andrews, 349 St. John's Place, Brooklyn, N. Y.

Gold Bricks and Platinum Staples!

Dear Editor:

Let us hope that you are not as tired of my ravings as are some other fans, and will permit this gold tack to glisten among the brass ones. Or can you feature it on the cover?

I greatly pity poor Wollheim. He is a "leetle teched in the haid"—to quote Snuffy Smith. Publicity or the crime light of his hideous organization must have caused his demented ravings. His letter in the August issue betrayed him, not me. Clark and Selikowitz did not staple the D'Journal at his orders; they stapled it at my orders. Wollheim, get specs, or read the name of our society again. We are not interested in whether fan publications have wire staples or not. Our cause is to remove them from science-fiction magazines. Is the D'Journal a science-fiction magazine?

Contrarily to Mr. Bashore—who claims to be on both organizations, thus proving his disloyalty to both—the *tao-pusa* will not win this first staple war, on the grounds of common sense. Wollheim wants platinum staples; we want wire staples removed, and any suitable binding substituted.

Magazines have already appeared bound with other than wire staples. But have you ever seen one with platinum staples? No! That proves that Mr. Bashore is wrong, that Wollheim's plan was beaten before it was begun, and that victory will sooner be ours than his. Am I not right, editor? If so, please say so in your comment at the top of this letter.

As Wollheim said, his lowly paper, the *Leucocyte* has again come forth. But don't get excited, fans, for it is filled with the usual trash, falsehoods, gross exaggerations and personal bitterness. Wollheim forgets he is fighting for platinum staples, and goes into my past history for material. Finding none, he, or one of his dishonest spies made some up, and printed it. All in all, it's a very amusing attempt to blacken my character, where he failed to blacken and destroy the SPWSSTFM. Wollheim, however,

made one error in the paper. He went just a little too far in one of his false charges, and he shall regret it. But, so much for him, his cheap fronts are easily broken through.

Mr. Bashore, you contradict yourself. You say the *tao-pusa* will win the war, then you say you got your copy minus two staples! Open your eyes, that you may see! Cannot you see our hand in that? Already, one by one, we are removing the bodacious staples. If there was no chewing gum in place of those missing staples, blame the news dealer.

As for Mr. Mink and his society to end societies, phooey, we will stamp him out—or vice versa—if any other torches care to join us in fighting him, say so.

Long live the SPWSSTFM.—Bob (Dictator) Tucker, 517 East Washington Street, Bloomington, Illinois.

We Learn to Take It!

Dear Editor:

First, I must put in a serious word of comment, not against Astounding Stories, but against the contemporary science-fiction authors. As Virginia Kidd said, "Your stories really aren't good." I agree with her completely on that; the authors have not the ability to undertake ninety-five per cent of their stories. As science-fiction, the stories of Keller, Hamilton, and Williamson may be excellent, but as literature, they do not receive a very high rating.

Once in a great while a really good story—good as to literary value—may be published, but that, I am sorry to say, is not often. *Exile of the Skies* was, in my opinion, the best story, both scientifically and as literature, of 1934. Weinbaum, too, has done admirably in the past year. As for the others none have been consistent or have they reached the standard of Vaughan or Weinbaum.

Now that I have expressed my opinion, of all science-fiction, I am going to put in a word about Astounding. I have probably intimated before that your magazine is not, in my opinion, the best in science-fiction. I have studied this thoroughly and have arrived at three reasons for my above opinion. First, you give the readers a larger number of stories than any other scientific-fiction magazine. I find no fault with the number, but it seems that it has cut down the quality of the magazine.

Your contents each month point out that you are trying to fill a certain schedule of stories—one novel, two novelettes, five or six shorts, and a serial. In filling that schedule, you are not able to obtain worthwhile stories, and so reduce the quality of your periodical. Next, several of the editor's pages, after reading, left the impression that you were giving yourself a great deal of praise, boasting. Certainly that self praise doesn't help your reputation very much. Thirdly, names don't count; it's the stories that matter. A list of popular authors may be good publicity, but to the readers who have been reading scientific-fiction for several years, it doesn't mean much. I am sure, also, that the majority of your readers have been active fans for some time. So, just because Taine or Keller has written a story, it doesn't mean that it is going to be a classic.

The August issue, I am sorry to say, I did not like much. Out of the eight complete stories, I enjoyed only three—*Rebellion*, *Son of Redmask*, and *The Phantom Dictator*; the stories rating in the order given. In *The Galactic Circle*, Williamson attempted something a little bit beyond his ability. The other stories I did not care for, either because of faulty science, weak ideas, or a badly written plot.

I must end this rather lengthy letter, due to both lack of space and more ideas to comment. If you consider this letter worthy enough to be printed, I should be glad to hear from any other readers about the ideas I have written of above. —Raymond Hood, Jr., SFL PC No. 900.



Movie action

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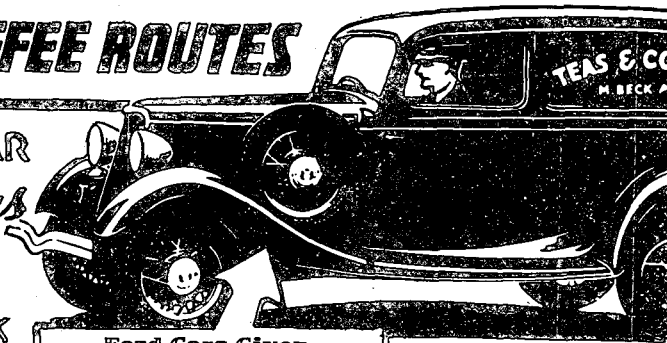
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